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Maryland

TWENTIETH ANNUAL REPORT

UNIVERSITY OF MARYLAND

EXTENSION SERVICE

TECHNOLOGY AND SCIENCE ROOM

FOR THE YEAR 1934

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Cooperative Extension Work In Agriculture and Home Economics, Extension Service, University of Maryland, and the United States Department of Agriculture Cooperating.

T. B. SYMONS, Director

Distributed in furtherance of acts of Congress of May 8 and June 30, 1914.

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COUNTY AGENTS—1934

County	Name	Headquarters
Allegany	*R. F. McHenry	Cumberland
Anne Arundel	*Stanley E. Day	Annapolis
Baltimore	*H. B. Derrick	Towson
Calvert	*John B. Morsell	Prince Frederick
Caroline	*W. H. Evans	Denton

*In cooperation with U. S. Department of Agriculture.
†Part-time specialists.

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EXTENSION SERVICE

FOR THE

YEAR 1934

LETTERS OF TRANSMITTAL

DR. R. A. PEARSON,
President, University of Maryland:

I have the honor to submit herewith the Twentieth Annual Report covering the work of the Extension Service of the University of Maryland, in cooperation with the U. S. Department of Agriculture, for the calendar year 1934, together with a financial report for the fiscal year ending June 30, 1934.

Respectfully submitted,

THOMAS B. SYMONS,
Director, Extension Service.

January 1, 1935.

HON. GEORGE M. SHRIVER,
Chairman, Board of Regents:

In accordance with the requirements of the Act of Congress approved May 8, 1914, and known as the Smith-Lever Act, I have the honor to transmit herewith, for submission to the Governor of the State, the Twentieth Annual Report covering the work of the Extension Service of the University of Maryland, in cooperation with the U. S. Department of Agriculture, for the calendar year 1934, together with a financial report for the fiscal year ending June 30, 1934.

Respectfully submitted,

R. A. PEARSON,
President.

January 1, 1935.

TO HIS EXCELLENCY HARRY W. NICE,
Governor of Maryland:

I have the honor to transmit herewith the Twentieth Annual Report covering the work of the Extension Service of the University of Maryland, in cooperation with the U. S. Department of Agriculture, submitted to me through the President of the University.

Respectfully submitted,

GEORGE M. SHRIVER,
Chairman, Board of Regents.

January 4, 1935.

TWENTIETH ANNUAL REPORT

OF THE

UNIVERSITY OF MARYLAND

EXTENSION SERVICE

FOR THE YEAR 1934

BY THOMAS B. SYMONS, *Director*

INTRODUCTION

THE YEAR 1934 was a momentous one in the work of the Maryland Extension Service. It was a year fraught with unending problems and difficulties, which have been overcome, and we have registered victories and accomplishments that in previous years we would have believed unattainable. We have accepted responsibilities that in the early days of extension work we would have believed entirely out of the realm of extension and educational activity. We have taxed our resources almost to the breaking point in an endeavor to meet the challenge. The most satisfying result has been the fine cooperation of the people of the State in carrying out the adjustment programs and relief measures that have been administered through the Service.

On the whole, the year has been a fairly satisfactory one to Maryland farmers. Evidences of improvement in farming conditions are apparent on all sides. Although farm people in this State still are far from complete recovery from the effects of the depression, yet we feel that substantial progress toward that end was made during 1934.

It is felt that prospects for 1935 are much brighter than during the last few years and we are hopeful that with normal crop conditions and improvement in the purchasing power of consumers a gradual improvement in conditions surrounding

rural people will be in evidence. It is my belief that the next three years will be the most eventful of our time in constructive measures that will be developed for betterment of life in the country, as well as in the city. We have made an approach to adjustment of crops to consumer demand. True, it has been an experiment, but, if I judge aright, the farmers of this State, and of the nation, will no longer produce blindly with no thought of consumptive demand.

I am of the belief that adjustment activities and extension work are synonymous. I feel that the duty of the Extension Service lies in serving the broader field of agricultural rehabilitation, as well as giving technical education in modern practices on the farm and in the home. Questions concerning the realm of Extension activities naturally have arisen in the determination of policies for carrying out the adjustment programs. The attitude in this State has been to assume these additional duties and responsibilities, with the satisfaction of rendering greater service to the people of the State. While some phases of regular Extension programs have of necessity been curtailed during the last year, due to pressure in conducting the adjustment campaigns, it is my belief that Extension Agents will thus broaden their outlook and their field of usefulness. In the future, as in the past, they will be able through organization of themselves and their office endeavors to administer, in cooperation with farmers' organizations, the various adjustment programs, as well as conduct the regular technical educational work incident to the needs of the people in their respective counties.

A Planned Production and Marketing Program

NOTWITHSTANDING OUR INDIVIDUAL OPINIONS as to certain national policies and their effect upon the agricultural industry, we must all agree as to the desirability of a planned agricultural policy as contrasted with the incoherent and competing policies that have prevailed in this country far too long. I believe we can all subscribe to the development of a planned production and marketing program involving all major crops and products, as well as minor farm commodities in our State. It behooves us, therefore, to be thinking of the application of marketing agreements for some of our minor

crops and discussing these matters with producers, so that additional legislation may be supported, if such is necessary to secure desired results.

In the development of such plans, I believe we will come to farm allotments in production. Such allotments will cover a proper production of all adapted crops without injunction that a farmer may not produce more, but with the assurance that he will receive fair prices only for his allotted quantity of crops. Any excess raised may be sold locally at the price it will bring, but will not interfere with a fair return on the quoto allotted. Farm organizations, Extension forces, and all leaders in agriculture never had a greater opportunity than to assist in working out this problem in the next year or two.

Northeastern Conference

A NORTHEASTERN CONFERENCE of agricultural leaders was a significant movement of the last year. This was suggested by the Directors of Extension, in cooperation with officials of the U. S. Department of Agriculture. The Conference was held in New York on November 8, 9 and 10 for the purpose of considering proposed programs for the dairy, poultry, fruits and vegetables, and potato industries. It was very successful in emphasizing to the people in this territory the favorable conditions surrounding Northeastern agriculture.

It is significant that to January 1, 1935, only 1.05 per cent of the $527,501,795.92 that has been paid to farmers of the United States in crop adjustment programs was paid to farmers in the twelve Northeastern States, to which group Maryland is attached geographically. Also, it is significant that of the $5,541,182.42 paid to farmers in these twelve states, Maryland farmers have received $1,567,166.69, or 22.9 per cent of the whole. From these figures it may be seen readily why Northeastern farmers as a whole feel that they have been somewhat neglected. It is evident that Maryland farmers are somewhat more fortunate, due to the fact that their major crops have better fitted into the control campaigns. I feel it is essential that we assist in developing a regional consciousness, which will greatly help our whole territory. Within these twelve states there is 37.8 per cent of the consuming public of the United States, approximately 60 per cent of the

bank resources of the country, and 41.8 per cent of the manufactured products of the nation are made in this remarkably concentrated area. These facts, and others that could be cited, emphasize the favorable geographical location and wonderful opportunity in the Extension field, as well as for the farmers of this section.

A permanent dairy conference has been set up to consider the many problems confronting the industry in this area. A Northeastern Poultry Council has likewise been formed, and it is hoped that a similar agency will be created to consider the fruit and vegetable interests.

Milk Control Legislation

MANY PROBLEMS have developed during the last year in connection with distribution and sale of milk in this State and in this area. The price of milk to producers has been greatly reduced and cooperatives have had a most difficult time, due to increased production and to competition among distributors, which led to variations in prices paid to producers and caused variations in the street price to consumers. All of these factors led to unstable conditions in the markets. In an attempt to remedy this situation the Federal Government issued licenses and marketing agreements in various milk sheds. These were practically suspended, however, due to court action brought about by independent distributors. This, in turn, led to efforts to obtain the desired relief through appointment of State Milk Control Boards.

In this State a special committee was appointed by the Governor in December to consider legislation providing for a Milk Control Board to aid in the situation. I am not unsympathetic to such a proposal. It is my suggestion, however, that the matter be approached in such manner as to reduce possibility of error to a minimum. Experience in other states with similar Boards might well be given careful study in order to avoid some of the troubles that have been encountered. It must be remembered that a large number of our milk producers ship their milk to markets outside of the State, that such legislation should carry with it concurrent jurisdiction and cooperation with the Federal Government, and that a measure of this kind implies serious responsibilities on the

part of the State, as well as the industry. It is wise to attempt to accomplish by such legislation only those things that can be done thoroughly and well. It is well to recognize that general chaos results from attempts to control without adequate enforcement, adequate authority, and sufficient funds for effective operation. Such a Milk Control Board should be recognized as an impartial referee by the industry and extreme care should be exercised that control legislation for this and other commodities does not retard nor minimize the achievements in cooperative marketing among producers.

Land Use Policy

THERE IS EMERGING gradually a national sentiment for better use of our land resources. Its purpose is to eliminate the use of land that is not capable of affording a minimum standard of living, develop agricultural production on the most suitable soils, and aid in raising the standards of living in many agricultural regions. Proper classification of lands to eliminate those unsuited to agriculture is being considered. A start has been made in this work in Maryland and I believe the Extension Service should encourage discussion of this large and important problem. Along with better land use we will see better forestry and conservation of wood, so essential to agriculture. We will see the conservation of wild game on the untillable lands that will be helpful and a joy to our people. We will see likewise the conservation of our water resources and greater use of them for the benefit of all people. We will see provision for wholesome recreation available to all people and a distinct feature of our lives.

The Service has taken the lead in cooperating with the Federal Government and with the State Planning Commission and other State Departments in selecting certain lands in the State that are unsuited for agricultural production and which we hope will be purchased by the Government and later turned over to the State for conservation purposes. Certain areas may be devoted wholly to conservation and reforestation, while other areas will serve as attractive recreational sites. This, with the wonderful possibilities of some sections, will serve to attract many visitors to our State and should be a valuable asset.

Finances

IT IS A MATTER of gratification that many counties have restored the cuts made previously in county appropriations. This is a tribute to the work of the Extension Agents, as well as a recognition on the part of the people in these counties of the valuable service rendered.

Problems associated with finances of the Service, arising from curtailment of funds, have been most difficult during the last year. The severe cut of 40 per cent in appropriations by the State has made it necessary to curtail our work in many directions, in spite of increasing demands on the part of the people.

Fortunately, the Service has had some assistance from the Federal Government to aid in financing the adjustment campaigns.

It is hoped that our State appropriation may be restored, at least in part, so as to enable us to meet these increasing demands. The cut of 10 to 15 per cent in salaries to workers has likewise been difficult to adjust. Many sacrifices have been made on the part of our workers in their devotion to carry on, even with reduced salaries. It is hoped that these reductions may be reinstated at as early date as practicable.

Agricultural Adjustment Activities

Wheat Production Control—Although the educational campaign preceding the signing of applications for contracts and the actual signing of contracts was carried on before the beginning of this year, work in connection with the wheat program has been a factor throughout the entire year. Due to the extremely diversified character of Maryland agriculture, a great many problems arose which were not covered in the regular administrative rulings or otherwise, and it was necessary for those in charge of the program in this State, especially the county agents, to devote much time to assisting farmers in making the required adjustments. Wise and economic use of the "contracted acres" presented many problems to the specialists in various lines and the Service as a whole rendered invaluable aid to those who were cooperating in the adjustment program.

Development of a practicable and satisfactory method for measuring acreage and determining compliance with contracts offered a difficult problem under the conditions existing in Maryland. The method finally worked out proved exceptionally satisfactory to all concerned. A circular published by the Extension Service entitled "How to Calculate Field Areas" was in so great demand, both in this State and other states, that a reprint was necessary.

It is gratifying to state that the reduction in wheat acreage made by contract signers in Maryland exceeded the percentage required by the contracts signed by them.

A brief summary of the wheat adjustment program is shown in the following table:

Crop	Number of farmers signing contracts	Payments on 1933 crop	Payments made or to be made on 1934 crop	Approximate payments on two crops
Wheat.....	7,817	$818,000	$818,000	$1,636,000

Corn-Hog Control—Although the program for adjusting production of corn and hogs was not as well adapted to Maryland conditions as the wheat program, it was the aim to give the growers in this State a thorough understanding of the situation, the provisions of the contract offered them by the Government, and to assist all who desired to cooperate in the program in doing so. An intensive campaign of education was conducted in all counties to acquaint producers with the facts involved. Two or more series of meetings were held, whereby virtually all corn and hog growers who were sufficiently interested to attend could obtain first-hand information. With the excellent cooperation of the press of the State, by liberal use of letters, by radio, and by a large number of personal calls, a determined effort was made to reach all corn and hog growers. The success of this intense effort is reflected in the number of contracts signed.

Problems arising in connection with checking compliance, technicalities of the many forms required, disposal of surplus hogs, and other phases of the program, were numerous and exceedingly exacting. From the experience obtained, it seems

evident that the program may well be greatly simplified in the mutual interests of all concerned.

The following table gives briefly the results of the corn-hog campaign:

Crop	Number of farmers signing contracts	Payment as to December 1	Estimated Payments to come	Approximate total benefit payments
Corn and Hogs.	2,959	$241,593	$383,407	$625,000

Tobacco Adjustment—In order to deal effectively with problems affecting the tobacco industry in Maryland, it was found necessary to develop a program of adjustment specifically for this State and different from the programs promulgated for other tobacco growing sections of the country. With the cooperation of leading tobacco growers and officials of the Maryland Tobacco Growers' Association, the Extension Service devoted a great deal of effort to working out with officials of the Agricultural Adjustment Administration a program for adjusting production of Maryland tobacco. Due to the

Pageantry has reached a high state of development in many communities during the last few years. This is a scene in the pageant of Queen Nicotina and her court at the annual Charles County Fair last fall.

comparatively limited funds derived from such processing tax as could be levied under the law, it was not possible to go as far in dealing with this important Maryland crop as would be desirable. Nevertheless, the program as worked out was presented to growers in all tobacco growing sections of the State through a thorough campaign of education as to its provisions, and assistance in making out contracts and adjustment of their production was given to those who desired to cooperate in the plan. It is believed that it will be an important step toward placing the tobacco industry in Maryland upon a more stable basis and reducing the percentage of low-grade tobacco, which in recent years has been a troublesome factor in marketing the crop.

The following table gives a resumé of the results in the tobacco adjustment program:

Crop	Number of farmers signing contracts	Payments made to December 1	Estimated Total payments
Tobacco.....	684	$38,346	$60,000

Emergency Dairy Activities—The dairy industry of Maryland is the greatest source of income to farmers of the State. Problems associated with various phases of the dairy industry have been practically a continuous issue throughout the year. Considerable effort was given by the Extension Service to attempts of dairy interests of the State and the officials of the Adjustment Administration to work out a program of adjustment for dairy products. While no specific program of adjustment was adopted and carried out, the Service has joined with the dairy interests in dealing with a great many vital problems. As stated elsewhere, the activities designed to encourage efficient and low-cost production were continued. At the same time, every effort was made to assist dairymen in dealing with the perplexing problems encountered in marketing their products.

Early in the year a critical situation existed in the Philadelphia milk shed, which includes most of the territory on the Eastern Shore of Maryland and certain districts in other sections of the State. More recently Maryland producers have encountered other difficulties in that market. Problems con-

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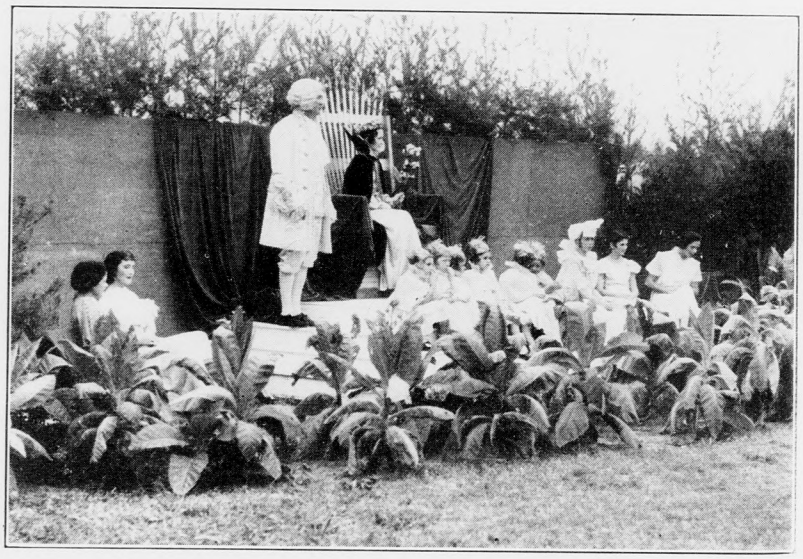

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fronting dairymen supplying the Baltimore and Washington markets have been equally vital and numerous. Extension forces have had an important part in assisting the dairy interests in coping with these problems. While it is not possible to set forth definitely the influence of Extension workers in keeping conditions as satisfactory as they have been in the dairy industry, it is certain that efforts of the Service at numerous conferences and the contacts which county agents have maintained with producers have been extremely important factors.

Other Adjustment Activities—In addition to the definite campaigns for crop adjustment that were conducted, a great deal of attention was given to the situation associated with a number of other important Maryland farm products. Many conferences were held with leaders in the respective industries and with officials of the Adjustment Administration and much effort was devoted to assembling and compiling data and information bearing upon the several problems.

Efforts were made to work out a marketing agreement for the benefit of growers of canning crops and the canners of the State. This end has not yet been achieved, but it is believed that progress is being made toward stabilizing conditions in that industry. A similar situation exists with respect to the potato industry; problems connected with acreage and marketing of this crop were the subject of many conferences and there is prospect that more effective solutions may be developed than have been employed in past years.

This Service was instrumental in bringing about the purchase of 121 carloads of Maryland potatoes by the Relief Administration, and similar quotas from other states in competing territory. This had a wholesome effect upon prices at a time when a stimulus of this kind was greatly needed and added substantially to the income of growers. The Extension Service cooperated in handling the purchase of these potatoes.

Attention was given to market garden crops and truck crops, particularly spinach and cabbage, with a view to improving the marketing situation. Marketing agreements under the agricultural adjustment act were considered, but, thus far, no such agreements have been adopted by Maryland growers of vegetables.

Early in the year a code for the commercial hatchery industry was developed and the Extension Service was largely responsible for carrying on the educational work necessary for putting into effect and maintaining the provisions of that code.

Emergency Activities

Farm Credit—Conditions with respect to obtaining needed credit by Maryland farmers have not been as acute apparently as they have been in many sections of the country. However, it was necessary for Extension workers, especially the county agents, to devote a large amount of time to assisting farmers who desired to take advantage of the various forms of credit made available through the different branches of the Federal Farm Credit Administration. The Service cooperated vigorously with the Federal Administration in setting up the necessary organization to make available its facilities, and in acquainting farmers with the newly created credit agencies. The offices of county agents and the headquarters office of the Extension Service served as clearing houses for information regarding the several types of loans from the Farm Credit Administration.

When a Crop Production Credit Corporation for this district was established in Baltimore, the Extension Service, and particularly the county agents, gave active and wholehearted assistance in organizing Crop Production Credit Associations throughout the State. The State was divided into five districts and an Association was formed in each district. It was arranged that farmers could make application for production credit loans at the office of their county agent, who gave them the necessary assistance in making out their applications and providing the required information. Similar service was given by county agents to farmers who desire to apply for loans from the Federal Land Bank, or from the funds provided by Act of Congress for short-time loans to purchase seed and fertilizer. Most farmers desiring such loans seek the aid of their county agent and in some counties assistance was given in making out more than one-hundred applications.

The State Farm Debt Conciliation Committee, appointed by Governor Ritchie in 1933, and similar committees formed in each of the counties, functioned throughout the year and

rendered distinct service to a large number of farmers in adjusting their credit problems. The Director of the Extension Service is a member of the State Debt Conciliation Committee.

Pasturing Relief Cattle—At the urgent request of the Federal Emergency Relief Administration, an effort was made to pasture in Maryland as many as possible of the cattle purchased in the drought areas. Upon request of the State Relief Administrator, the Extension Service assumed the task of placing these cattle on farms where pasture was available and supervised their care while thus located. Under this project, 13,158 head of cattle were delivered to Maryland farmers and it is safe to say that as many more could have been placed in this State had not the project been discontinued on or about September 1. Cooperation was given also to the State Relief Administrator in distributing these steers to abattoirs and packing plants, as all the meat was canned for relief purposes. It is estimated that the project brought approximately $75,000 to the State, exclusive of the amounts involved in processing, canning and distributing the meat.

Submarginal Land Project—A number of conferences with State and Federal officials were held with a view to launching a program for better utilization of submarginal land in the State. Several proposed projects were drawn up, dealing with various areas and various uses for land involved. Upon advice of officials in Washington, we were asked to select a definite location where a considerable acreage of submarginal land could be purchased.

After conferences with the State Forester, soil experts and members of the State Planning Commission, an area in Garrett County was selected for study and investigation. This area involves about 15,000 acres of farm land, which is located within, or adjacent to the State forest in that county. Project leaders are at work taking options, looking toward the purchase of the poor land and making plans for transfer of farmers to other desirable lands in the county.

Tentative proposals are under way for location of wayside picnic grounds along highways and later on the possible selection of another submarginal area on the Eastern Shore.

It is possible also that a large recreational center may be selected in the vicinity of the cities of Baltimore and Washington.

Land Use Adjustment Survey—Along with the inauguration of a submarginal land program, the President requested a thorough study of the natural resources of the country, and the National Resource Board was set up to conduct such a survey and report to Congress.

At the request of Federal officials, a specialist of the Maryland Extension Service was designated as leader of this project in the State. He is making some comprehensive studies of the general classification of Maryland lands and their adaptation, which will be included in such report. It is assured that results of these studies will be of great value in planning future programs and activities in the State.

Proposed Subsistence Land Project—A definite proposal for establishment of a subsistence land project near Clarksville, Maryland, was presented to the Extension Service for consideration and cooperation in carrying out the project is requested. It proposes the purchase of about 400 acres of land, and securing a loan from the Federal Emergency Relief Agencies. This property would be divided into small tracts of approximately five to ten acres, on which persons on relief in Baltimore City who are adapted to farming and trucking operations would be given homes and opportunities for self-support. Small, inexpensive houses would be built and co-operative arrangements perfected whereby these relief families could engage in some particular phase of farming, such as poultry raising and truck growing.

It is not yet known whether the State and Federal Relief authorities will make a grant of money to finance this project.

Rural Housing Survey—Responsibility for directing and supervising a Rural Housing Survey in three Maryland counties was placed upon the Extension Service by the Civil Works Administration. Schedules were obtained from 7,558 rural homes in three counties. The cost of the survey was borne by the Civil Works Administration and unemployed persons in the counties were used primarily in making the survey.

The purpose of this project, which was part of a national project, was to obtain definite information on farm housing conditions. The data will serve as a foundation upon which to build a program for improved farm homes. Points covered in the survey included: Construction; Age of House; Condition of House; Water Supply and Sewage Disposal; Heating and Lighting; Laundry and Cooking Facilities; and Relative Importance of Repairs and Improvements Wanted.

This survey gives a dependable picture of present conditions and shows the needs. It reveals also that many improvements can be made by the farm occupant with practically no expenditure of money. Other improvements, which would add immeasurably to the comfort and health of the family, can be made with a very small outlay of money.

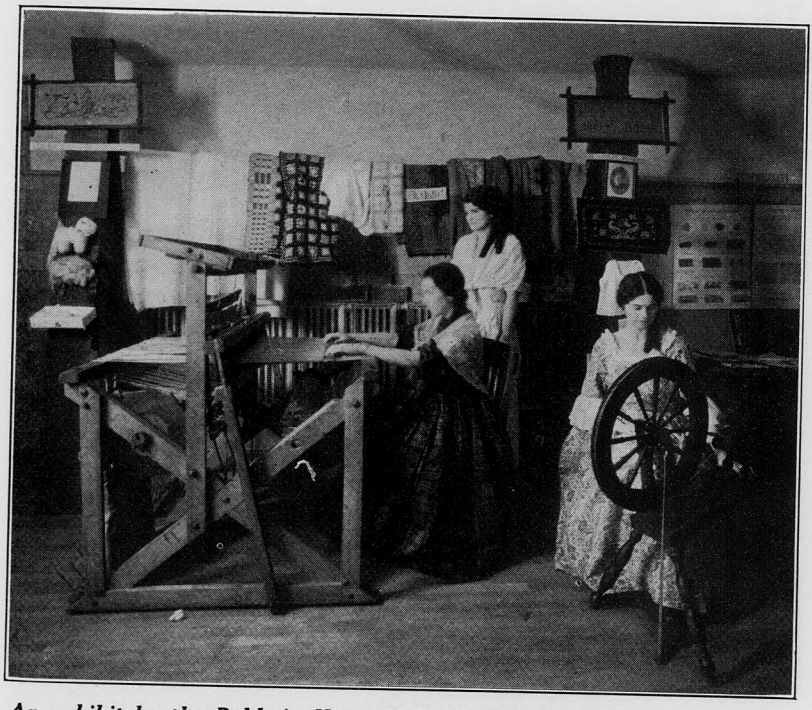
Cooperating Agencies

WITH the launching of various lines of work under the Recovery, Relief and Adjustment Administrations the Service was called upon for cooperation with a larger number and variety of agencies than in any previous year. The policy adopted in former years of joining forces with other agencies and organizations in constructive undertakings in behalf of the agriculture of the State was continued. It is an exceptional pleasure to express appreciation of the complete harmony which has existed among all forces and between the several organizations and agencies and the Extension Service. The general farm organizations—the Farm Bureau and Grange—the commodity organizations, and the newly created agencies have cooperated loyally with each other and with the Service.

In this report it is the aim to give due credit to the cooperating agencies in discussion of the particular projects with which they are associated. If in any case such credit is omitted, I hereby record the sincere appreciation of the Extension Service for all assistance received in carrying on its many lines of work.

Home-Makers Increase Activities

ELSEWHERE a more comprehensive statement is given of the progress in work by the home-makers of the State, but I desire here to commend the interest they have exhibited and the efforts they have put forth. Under the supervision of Miss Venia M. Kellar, State Home Demonstration Agent, they have adapted their programs of work to economic conditions surrounding them and have made notable achievements.



An exhibit by the Baldwin Home-Makers' Club of Baltimore County at their annual achievement day program. Modern weaving was a part of the exhibit and the value of using wool was shown in newly-made blankets, quilts, and Afghans.

In addition to meeting the difficult problems associated with conducting their own homes, rural women have given greater aid in supplementing the family income and have contributed most generously of their efforts and products to relief agencies in their respective communities.

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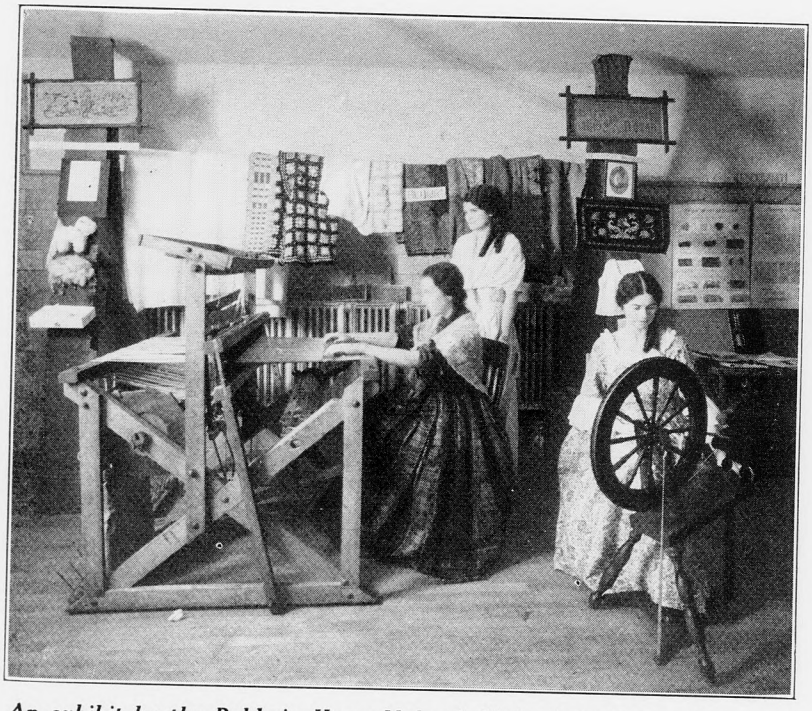

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It is gratifying to state that attendance at the annual Rural Women's Short Course, which is held at the University in June under the auspices of the Extension Service, not only showed a large increase over 1933, but was up to the maximum of former years. This record is a high tribute to the determination of Maryland women to take advantage of opportunities for self-improvement, regardless of economic stress.

Crop Yields and Values

WITH an increase of approximately $10,000,000 in the total farm value of the principal field, fruit and truck crops of Maryland, compared with 1933, the agriculture of the State took a decided step on the upward trend in 1934. Preliminary figures issued by the Division of Crop Estimates of the U. S. Department of Agriculture give the total value of all crops in 1934, with duplications eliminated, as $44,546,000. This compares with $34,510,000 in 1933, and the low point of $25,834,000 in 1932. To the estimated value of farm crops for the year should be added approximately one million dollars which was paid as benefit payments to farmers who cooperated in the adjustment programs. Although these values are still considerably below the values registered in the years before the depression, they are about 75 per cent above the low values of two years ago.

In the case of most crops, the increased value was due to improvement in both yields and prices, compared with the preceding year. With a few exceptions, such as peaches, the season was favorable for crop production.

Corn acreage was reduced about 45,000 acres, but with a yield per acre of 33 bushels, total production was three-quarters of a million bushels above the 1933 production. With an increase in price from 46 cents to 75 cents a bushel, the value of the crop was $12,746,000, a gain of more than five million dollars over 1933.

Wheat acreage was 8,000 acres less than in 1933 and the average yield was 20.5 bushels to the acre. This increase in yield resulted in a total production of 7,934,000 bushels, or a little more than one and one-half million bushels increase over the preceding year. This increase, with an increase in price

from 83 cents to 92 cents, gave a total value to the crop of $7,299,000, compared with $5,246,000 in 1933.

Acreage of oats was reduced, but higher yield and better prices resulted in a crop with a total farm value of $700,000, compared with $468,000 in 1933.

Barley acreage was a little less than the year before, but good yield and improved prices gave a substantially higher total value. With a somewhat larger acreage, good yield, and slightly higher prices, the rye crop was valued at $234,000, compared with $168,000 the preceding year.

The acreage and yield of potatoes were higher than in 1933, but with a price of 48 cents, compared with $1.09 a bushel, the total value of the crop was but little more than half that of last year.

With an estimated yield of 725 pounds to the acre, the tobacco crop was approximately three million pounds larger than in 1933. Production is estimated at 23,418,000 pounds and the value of the crop at $4,215,000. Owing to the fact that the tobacco crop is not sold until next year, the present estimate of value may be somewhat revised.

The commercial apple crop was a little smaller than in 1933, but this was more than offset in the value of the crop by somewhat better prices. Damage to the peach crop by freezing was so great that production was only 82,000 bushels, compared with 400,000 bushels the preceding year. Estimated production of pears was 94,000 bushels, which is much larger than in 1933, but about the same as in 1932.

An increase of one per cent in the total number of cattle, a decrease of 19 per cent in hogs, and no change in horse, mule, and sheep numbers on Maryland farms on January 1, 1935, compared with the same date last year, is indicated by the annual inventory estimates made by the Maryland Crop Reporting Service. The total value of all live stock on farms was $22,650,000, which is an increase of $3,092,000 over the value a year ago. The value per head for all species of live stock was higher than at the beginning of 1934.

In accordance with our custom of former years, a record of the estimated acreages, yields, and values of Maryland's prin-

cipal crops is included in this report. These estimates are furnished by the Bureau of Agricultural Economics, cooperating with our Service, and show the acreages, yields, and values of the several crops for 1934, with comparable figures for the two preceding years. The estimated numbers and values of live stock on farms January 1, 1935, are given also.

PRODUCTION AND VALUE OF CROPS

Crop and Year	Acres	Per Acre	Total	Unit	Per Unit	Total	Value Per Acre
Corn							
1934	515,000	33.0	16,995,000	Bus.	.75	$12,746,000	$24.75
1933	560,000	29.0	16,240,000	"	.46	7,470,000	13.34
1932	548,000	30.0	16,440,000	"	.31	5,096,000	9.30
Wheat							
1934	387,000	20.5	7,934,000	"	.92	7,299,000	18.86
1933	395,000	16.0	6,320,000	"	.83	5,246,000	13.18
1932	380,000	13.0	4,940,000	"	.50	2,470,000	6.50
Oats							
1934	44,000	30.0	1,320,000	"	.53	700,000	15.91
1933	50,000	24.0	1,200,000	"	.39	468,000	9.36
1932	57,000	25.0	1,425,000	"	.27	385,000	6.75
Barley							
1934	22,000	28.5	627,000	"	.67	420,000	19.10
1933	23,000	26.0	598,000	"	.52	311,000	13.52
1932	21,000	29.0	609,000	"	.37	225,000	10.71
Rye							
1934	20,000	15.0	300,000	"	.78	234,000	11.70
1933	17,000	13.0	221,000	"	.76	168,000	9.88
1932	19,000	12.0	228,000	"	.46	105,000	5.53
Buckwheat							
1934	5,000	22.0	110,000	"	.58	64,000	12.80
1933	6,000	18.0	108,000	"	.59	64,000	10.67
1932	5,000	17.6	88,000	"	.41	36,000	7.20
Potatoes							
1934	33,000	99.0	3,267,000	"	.48	1,568,000	47.52
1933	30,000	95.0	2,850,000	"	1.09	3,106,000	103.53
1932	31,000	92.0	2,852,000	"	.52	1,483,000	47.84
Sweet Potatoes							
1934	5,000	150.0	750,000	"	.70	525,000	105.00
1933	6,000	160.0	960,000	"	.55	528,000	88.00
1932	8,000	111.0	888,000	"	.35	311,000	38.88
Hay (All Tame)							
1934	403,000	1.43	578,000	Tons	13.00	7,514,000	18.65
1933	403,000	1.31	529,000	"	11.40	6,031,000	14.97
1932	403,000	1.16	468,000	"	9.50	4,446,000	11.03
Tobacco							
1934	32,300	725.0	23,418,000	Lbs.	0.180	4,215,000	130.50
1933	34,000	600.0	20,400,000	"	0.175	3,570,000	105.00
1932	35,000	775.0	27,125,000	"	0.170	4,611,000	131.74
Apples (Total Crop)							
1934	....	....	1,102,000	Bus.	.85	937,000	.....
1933	.....	....	1,312,000	"	.75	984,000	.....
1932	.....	....	1,368,000	"	.50	684,000	.....

PRODUCTION AND VALUE OF CROPS—(Continued)

Crop and Year	Acres	Per Acre	Total	Unit	Per Unit	Total	Value Per Acre
Apples (Commercial)							
1934	.....	....	615,000	"	.85	523,000	.....
1933	.....	....	657,000	"	.75	493,000	.....
1932	.....	....	756,000	"	.50	378,000	.....
Peaches							
1934	.....	....	82,000	Bus.	$1.70	$139,000	.....
1933	.....	....	400,000	"	1.00	400,000	.....
1932	.....	....	348,000	"	.85	296,000	.....
Pears							
1934	.....	....	94,000	"	.60	56,000	.....
1933	.....	....	66,000	"	.60	40,000	.....
1932	.....	....	92,000	"	.55	51,000	.....
Grapes							
1934	.....	....	614	Tons	50.00	31,000	.....
1933	.....	....	596	"	55.00	33,000	.....
1932	.....	....	625	"	50.00	31,000	.....
Tomatoes (For Mfg.)							
1934	55,800	3.3	184,100	"	15.90	2,927,000	$52.46
1933	46,200	2.9	134,000	"	15.30	2,050,000	44.37
1932	36,000	4.3	154,800	"	9.70	1,502,000	41.72
Sweet Corn (For Mfg.)							
1934	29,100	1.5	43,600	"	10.00	436,000	15.00
1933	19,600	1.8	35,300	"	8.50	300,000	15.31
1932	20,500	1.5	30,800	"	6.80	209,000	10.20
Cantaloupes							
1934	7,400	130.0	962,000	Crts.	.90	866,000	117.00
1933	7,700	110.0	847,000	"	.50	424,000	55.07
1932	8,100	103.0	834,000	"	.86	717,000	88.52
Strawberries							
1934	7,250	90.0	652,000	"	1.25	815,000	112.41
1933	8,060	105.0	846,000	"	.95	689,000	85.48
1932	7,600	80.0	608,000	"	1.35	821,000	108.03
Snap Beans (For Mfg.)							
1934	9,800	1.0	9,800	Tons	37.50	368,000	37.55
1933	8,200	1.3	10,700	"	39.00	417,000	39.00
Green Peas (For Mfg.)							
1934	13,500	1.1	14,850	"	52.40	778,000	57.63
1933	11,300	.8	9,040	"	45.60	412,000	36.46

LIVE STOCK ON FARMS

January 1, 1935

	Number	Value Per Head	Total Value
Horses and Colts	85,000	$99.00	$8,415,000
Mules and Mule Colts	28,000	122.00	3,416,000
Dairy Cows and Heifers	192,000	39.00	7,488,000
Heifers (1 to 2 years old)	26,000	21.00	546,000
Other Cattle	70,000	19.00	1,330,000
Sheep and Lambs	109,000	4.60	501,400
Swine, including pigs	147,000	6.40	941,000

ADMINISTRATION

AS PREVIOUSLY INDICATED, the administration of the Service was more burdensome during the past year than heretofore on account of the enormous amount of extra work and duties assigned the Service.

The cut in salaries effective during this full year was a severe handicap upon the members of the Service. This cut ranged from 10 to 15 per cent. It was made necessary to comply with the State policy and the large cut made in total finances to the Service from the State. It is hoped that some restitution can be made sooner or later for these deserving workers.

Comparatively few resignations were received from the field, but a number of changes were necessary at headquarters. Mr. C. E. Wise, who was temporarily designated to assist in supervising the Adjustment Campaign work, resigned to accept a position with the State Farm Bureau.

Mr. Paul Nystrom was designated as Assistant County Agent Leader to aid in crop adjustment programs.

For the most part, at headquarters as well as in the field, the burden of administration was carried with our present force.

Relationship of the Service with farm organizations continued sympathetic and cooperative. Much stimulation was given to the need of farm organizations and both the Farm Bureau and Grange increased their membership during the past year.

Splendid cooperation was received from the Boards of County Commissioners in the several counties. Many of the cuts in previous appropriations were reinstated and while the appropriations have not been returned to normal, yet there has been a wonderful expression of appreciation by the Boards of the Service rendered in the counties. This is reflected in the attitude of the people as well as the Commissioners regarding the splendid work conducted during the past year in all of our counties.

I am indebted to all members of the Service for their loyal support in administration of the work during these strenuous times and particularly to Mr. E. I. Oswald and Miss Venia M. Kellar for their aid in meeting the increased demands upon the Service.

EMPLOYEES AT HEADQUARTERS—1934

*THOMAS B. SYMONS	Director
*E. I. OSWALD	County Agent Leader.
*MISS VENIA M. KELLAR	State Home Demonstration Agent.
*A. H. SNYDER	Extension Editor.
*P. E. NYSTROM	Assistant County Agent Leader and Specialist in Farm Management.
*E. G. JENKINS	State Boys' Club Agent.
*MISS DOROTHY EMERSON	Girls' Club Agent.
*MISS FLORENCE MASON	District County Home Demonstration Agent.
*MISS K. G. CONNOLLY	Administrative Assistant.
†G. J. ABRAMS	Specialist in Apiculture.
*W. R. BALLARD	Specialist in Landscape and Vegetable Gardening.
H. C. BARKER	Specialist in Dairying.
WALTER C. BEAVEN	Specialist in Marketing.
†P. D. BROWN	Specialist in Tobacco.
†R. W. CARPENTER	Specialist in Agricultural Engineering.
*O. R. CARRINGTON	Assistant Extension Editor.
*J. A. CONOVER	Specialist in Dairying.
†E. N. CORY	Specialist in Entomology.
S. L. CROSTHWAIT	Horticultural Inspector.
†S. H. DEVAULT	Specialist in Marketing.
†CASTILLO GRAHAM	Assistant Specialist in Entomology.
†W. E. HARRISON	Assistant Specialist in Marketng.
†J. W. HEUBERGER	Horticultural Inspector.
*T. D. HOLDER	Specialist in Canning Crops.
*H. A. HUNTER	Specialist in Canning Crop Pathology.
†R. A. JEHLE	Specialist in Plant Pathology.
*A. V. KREWATCH	Specialist in Agricultural Engineering.
G. S. LANGFORD	Specialist in Insect Control.
†DEVOE MEADE	Specialist in Animal Husbandry.
†A. E. MERCKER	Specialist in Potato Culture.
*MISS MARGARET McPHEETERS	Specialist in Nutrition.
*F. W. OLDENBERG	Specialist in Agronomy.
*P. A. RAPER	Specialist in Poultry Marketing.
*W. H. RICE	Specialist in Poultry.
†C. S. RICHARDSON	Specialist in Educational Extension.
*K. G. SEIGWORTH	Extension Forester.
*S. B. SHAW	Specialist in Marketing and Chief, Maryland State Department of Markets.
*MISS HELEN SHELBY	Specialist in Clothing.
*M. M. SHOEMAKER	Specialist in Landscape Gardening.
†C. E. TEMPLE	Specialist in Plant Pathology.
J. M. VIAL	Specialist in Animal Husbandry.
*A. F. VIERHELLER	Specialist in Horticulture.
†E. P. WALLS	Specialist in Marketing.

COUNTY AGENTS—1934

County	Name	Headquarters
Allegany	*R. F. McHenry	Cumberland
Anne Arundel	*Stanley E. Day	Annapolis
Baltimore	*H. B. Derrick	Towson
Calvert	*John B. Morsell	Prince Frederick
Caroline	*W. H. Evans	Denton
Carroll	*L. C. Burns	Westminster
Cecil	*J. Z. Miller	Elkton
Charles	*P. D. Brown	La Plata
Dorchester	*Wm. R. McKnight	Cambridge
Frederick	*H. R. Shoemaker	Frederick
Garrett	*J. H. Carter	Oakland
Harford	*H. M. Carroll	Bel Air
Howard	*John W. Magruder	Ellicott City
Kent	*J. D. McVean	Chestertown
Montgomery	*O. W. Anderson	Rockville
Prince George's	*P. E. Clark	Upper Marlboro
Queen Anne's	*Kenneth Baker	Centerville
St. Mary's	*G. F. Wathen	Loveville
Somerset	*C. Z. Keller	Princess Anne
Talbot	*R. S. Brown	Easton
Washington	*M. D. Moore	Hagerstown
Wicomico	*J. P. Brown	Salisbury
Worcester	*R. T. Grant	Snow Hill

*In cooperation with U. S. Department of Agriculture.
†Part-time specialists.

ASSISTANT COUNTY AGENTS

County	Name	Headquarters
Allegany, Carroll and Washington	*Milo S. Downey	Cumberland
Baltimore	W. H. Carroll	Towson
Charles	*Bergen Brown	La Plata
Harford	*G. W. Clendaniel	Bel Air
Kent	*Stanley B. Sutton	Chestertown
Montgomery	*A. A. Ady	Rockvilie

Local Agents—(Negro Work)

County	Name	Headquarters
Southern Maryland	*J. F. Armstrong	Seat Pleasant
Eastern Shore	*L. H. Martin	Princess Anne

HOME DEMONSTRATION AGENTS—1934

County	Name	Headquarters
Allegany	*Maude A. Bean	Cumberland
Anne Arundel	*Mrs. Georgiana Linthicum	Annapolis
Baltimore	*Anna Trentham	Towson
Calvert	*E. Elaine Knowles	Prince Frederick
Caroline	*Bessie M. Spafford	Denton
Carroll	*Agnes Slindee	Westminster
Cecil	*Viola G. Cook	Elkton
Charles	*Mary Graham	La Plata
Dorchester	*Hattie E. Brookes	Cambridge
Frederick	*Helen E. Pearson	Frederick
Garrett	*Margaret K. Burtis	Oakland
Harford	*Catharine Maurice	Bel Air
Howard	*Myrne L. Hendry	Ellicott City
Kent	*Helen M. Schellinger	Chestertown
Montgomery	*Edythe M. Turner	Rockville
Prince George's	*Ethel M. Regan	Hyattsville
Queen Anne's		
St. Mary's	*Ethel Joy	Leonardtown
Somerset	*Hilda Topfer	Princess Anne
Talbot	*Margaret Smith	Easton
Washington	*Ardath E. Martin	Hagerstown
Wicomico	*Marian G. Swanson	Salisbury
Worcester	*Lucy J. Walter	Snow Hill

LOCAL HOME DEMONSTRATION AGENTS (Negro Work)

County	Name	Headquarters
Charles, St. Mary's, Prince George's and Montgomery	*Mrs. Arminta W. Dixon	Washington, D. C.
Somerset	*Mrs. Justine N. Clark	Princess Anne

*In cooperation with U. S. Department of Agriculture.
†Part-time specialists.

Sources of Extension Revenue

DURING the fiscal year ending June 30, 1934, there were available for Extension work the following funds: Federal Smith-Lever $60,023.83; Federal Smith-Lever Supplementary $19,202.09; Capper-Ketcham $26,076.61; Additional Federal Cooperative funds $17,000.00; State Smith-Lever $29,238.30; County Demonstration funds $38,287,10; State funds for General Extension $15,953.98; State Horticultural fund $11,301.-28; Marketing Extension fund $11,894.94; Canning Extension fund $7,483.27; Poultry Extension fund $2,925.99; Dairy Extension fund $1,436.86; Tobacco fund $1,735.56; Beekeeping fund $1,091.70; State Dairymen's fund $3,077.74; Miscellaneous funds, including Advanced Registry, State Department of Forestry funds, Marketing Inspection funds, etc., $25,-711.36; and $57,083.00 contributed by the various counties; or a total of $329,523.61. In addition, $21,894.10 was used for Japanese Beetle and Insect Control work, and $24,649.71 was disbursed by the U. S. Department of Agriculture; making a grand total of $376,067.42.

During the present fiscal year ending June 30, 1935, there are available: Federal Smith-Lever $60,023.83; Federal Smith-Lever Supplementary $19,202.09; Capper-Ketcham $26,076.61; Additional Federal Cooperative fund $17,000.00; State Smith-Lever $27,772.27; County Demonstration fund $39,600.00; State funds for General Extension $10,500.00; State Horticultural fund $8,640.00; Marketing Extension fund $8,400.00; Canning Extension fund $6,000.00; Poultry Extension fund $2,400.00; Dairy Extension fund $1,650; Tobacco fund $1,-500.00; Beekeeping fund $900.00; State Dairymen's fund $3,-000.00; Miscellaneous funds (estimated), including Advanced Registry, State Department of Forestry funds, Marketing Inspection funds, etc., $20,000.00; and $60,382.94 contributed by the various counties; or a total of $313,047.74. In addition, there are available $15,000.00 for Japanese Beetle and Insect Control work and $28,139.00 disbursed by the U. S. Department of Agriculture; making a grand total of $356,186.74.

Changes in Personnel

Mr. James A. Dickey resigned as Farm Management Specialist, June 30, 1934.

Mr. George W. Kable, Specialist in Rural Electrification, resigned June 30, 1934.

Mr. A. V. Krewatch was reappointed in the Extension Service as Specialist in Agricultural Engineering, August 1, 1934.

Mr. P. E. Nystrom was promoted to Assistant County Agent Leader, April 1, 1934.

Mr. Kenneth J. Seigworth was appointed Extension Forester, January 20, 1934 and granted a leave of absence August 16, 1934.

Mr. Walter W. Simonds was temporarily appointed Extension Forester, October 1, 1934.

Mr. Mark M. Shoemaker, Specialist in Landscape Gardening, was granted a leave of absence August 21, 1934.

Mr. Paul W. Smith, Specialist in Crop Statistics, resigned December 20, 1933.

Mr. Charles E. Wise, Jr., Specialist in Agricultural Engineering, resigned March 15, 1934.

Mr. W. B. Posey, County Agent in Prince George's County and Tobacco Specialist, resigned March 31, 1934.

Mr. P. E. Clark was promoted to succeed W. B. Posey as County Agent in Prince George's County.

Mr. P. D. Brown continued as County Agent in Charles County and was promoted to Acting Tobacco Specialist, April 1, 1934.

Mr. Bergen Brown was appointed as Assistant County Agent of Charles County, May 1, 1934.

Mr. W. Sherard Wilson was temporarily appointed Assistant County Agent of Howard County, August 15, 1934.

Miss Priscilla B. Pancoast, Home Demonstration Agent in Cecil County, resigned December 31, 1933.

Miss Myrne L. Hendry, Home Demonstration Agent in Howard County, resigned February 21, 1935.

Miss Margaret T. Loar, was temporarily appointed Assistant Home Demonstration Agent in Allegany County September 9, 1934—Resigned November 30, 1934.

Mrs. Katherine B. Bromley, was appointed Temporary Home Demonstration Agent in Washington County November 1, 1934—Resigned December 31, 1934.

Equipment

IT WAS THE AIM to keep purchases of equipment at a minimum, in accordance with reduced finances. Some additions were made in the way of clerical equipment, such as filing cases at headquarters and in some of the county offices, and an adding machine. It was possible also to increase our equipment for visual instruction by the purchase of a sixteen millimeter moving picture machine with sound reproduction, and the supply of charts was considerably augmented.

Efficiency of Workers

EVERY EFFORT was made during the past year to maintain the efficiency of individual members of the Extension Service Staff.

Regular conferences were continued, notwithstanding the pressure of emergency work.

We are hoping that a Graduate School for Extension workers may be developed at the Institution that will permit our agents and workers to participate. Question has now arisen as to the advisability of inaugurating such a school during the coming year on account of the inability to permit our workers to leave their positions for any extended period during the season. There is no doubt that opportunity should be provided for Extension workers to take time off for advanced study. We hope that some progress can be made in this direction during the coming year.

The Annual Conference was held in January and while reduced in time, as last year, it was very helpful to all concerned.

Records of Office Work

TOO MUCH IMPORTANCE cannot be assigned to the need for competent office records. With the change in the Annual Report blanks this year, greater effort was needed to explain the changes and combination of records of Agents in the counties in one form.

The work of the adjustment campaigns has increased the necessity for thoroughly competent Federal and State statistics and the use of same in various lines of work.

We have had the cooperation of the Crop Estimate Department, through Mr. Richard Ross, who resigned recently and has been succeeded by Mr. J. A. Ewing.

Greater demands have been made for records at headquarters. The adjustment of financial records has been more difficult than ever before on account of the Agricultural Adjustment funds and the cut in our regular State funds. This work, however, has been handled competently by Miss K. G. Connolly and associates in the office.

During the year a total of 56,657 first-class letters were mailed from headquarters and the total pieces of mail numbered 128,388. In all, 1,516,308 first-class letters were sent by the Extension Service throughout the State.

PUBLICATIONS

DISSEMINATION of agricultural information, particularly in connection with the various adjustment programs carried on in the State, was an extremely important phase of Extension activity. Intelligent action by the thousands of individual farmers with respect to adjustment contracts depended upon a correct understanding of the situations and factors involved. Various forms of publications, radio, and illustrative materials had a prominent part in giving them the necessary information. All available facilities within the resources at hand were utilized to this end.

It is gratifying to report that the public press has afforded fine cooperation and has carried an increased amount of news and information of agricultural and Extension activities. Most cordial relations have existed between the Service and the public press, both daily papers and the weekly papers in the several counties.

The types of publications issued by the Extension Service in former years were continued. These included bulletins, circulars, information cards, copies of important addresses, and the *Extension Service News*. In addition, an unusual amount of mimeograph material was issued, particularly in the form of proposed programs for land utilization, rehabilitation, and the like.

News Service—An average of three or four news and informational stories, prepared especially for the county press, were sent weekly to all papers in the State, the total of such stories and items for the year being in excess of 250. Local stories supplied to this class of papers by the agents in the field greatly exceeded the number sent from headquarters. The daily press was served by special news releases and every assistance was given to reporters in obtaining news stories and feature articles.

Radio—Through the fine cooperation of Radio Station WBAL, in Baltimore, a regular period of broadcast has been

maintained since December, 1931. The material presented consisted of short talks on timely subjects by specialists of the Service and other branches of the University, and conversations, or interviews between Mr. R. M. Watkins, of the Public Speaking Department, and the several specialists.

The Maryland Extension Service cooperated with the U. S. Department of Agriculture and the Adjustment Administration in presenting the regular "Farm Flashes" of the Department weekly by three stations in the State. These stations are: WBAL, Baltimore; WTBO, Cumberland; and WJEJ, Hagerstown.

Illustrations—Use of visual instruction material, especially in the form of charts and graphs, continues to increase each year. Through the fine work of Mr. Carrington in preparing this type of material, it has been possible to greatly enhance the effectiveness of extension teaching. Constant replacement of charts and additions to the supply are necessary, because most of them carry the most timely information.

Other visual instruction facilities, such as film strips, slides, and moving pictures, were used about as in former years. Cooperation was given in a number of cases to CCC camps within the State.

Again, it is my pleasure to express grateful appreciation of the valuable cooperation received from Mr. Reuben Brigham, and others of the Office of Cooperative Extension Work, U. S. Department of Agriculture, in connection with visual instruction materials.

Publications Issued—During the fiscal year ended June 30, 1934, the following publications were issued: Bulletin 55, "Home Canning in Maryland," (revised), 28 pages, 8,000 copies; Bulletin 56, "Garment Finishes," 32 pages, 5,000; Bulletin 59, "Pickles and Relishes," (reprint), 20 pages, 5,000; Bulletin 60, "Jellies, Jams and Preserves," 32 pages, 5,000; Bulletin 70, "The Small Vegetable Garden," 14 pages, 10,000; Bulletin 71, "Tomato Production for Canning," 16 pages, 5,000; Bulletin 72, "Building the Future of Maryland Through 4-H Club Work," 26 pages, 5,000; Circular 76, "The Spirit of the New Kitchen," (reprint), 12 pages, 3,000; Circular 78, "What to Buy for your Kitchen," (reprint), 12 pages, 3,000; Circular

99, "Coldframes for Tomato Plants," (reprint) 8 pages, 2,000; Circular 100, "The Cantaloupe Law of Maryland and Regulations Relating to Its Enforcement," 4 pages, 5,000; Circular 101, "Live at Home," 2 pages, 5,000; Circular 102, "How to Calculate Field Areas," (reprint), 12 pages, 1,500; Circular 103, "Spray Calendar," 34 pages, 3,600; Circular 104, "Producing Snap Beans for Canning," 12 pages, 2,500; Circular 105, "Your Small Motor—How to Increase Its Usefulness," 4 pages, 2,-500; Circular 106, "Soybeans for Hay and Seed," 8 pages, 2,000; Circular 107, "Sudan Grass for Hay and Pasture," 4 pages, 2,000; "Nineteenth Annual Report," 80 pages, 2,000; Pamphlet, "Problems on Our Own Doorstep," 16 pages, 1,000; Poultry Calendar, 30 pages, 1,500; Leaflet, "Ten-Ton Tomato Club," 4 pages, 5,000; Leaflets (10) "Improvement of Home Grounds," 4 pages each, 70,000; Leaflet, "For Bigger Profits, Plant Early," 4 pages, 4,000; Leaflet, "Tomatoes," 4 pages, 4,000; Record Blanks for various projects; *Extension Service News,* 4 pages, 2,500 copies each month.

COUNTY DEMONSTRATION WORK

THE PROGRAM carried out by county agents was essentially an adjustment program in two respects. One of the major objectives was to assist farmers in cooperating in the crop adjustment programs, and it involved adjustments in activities of the agents. An outstanding feature was the degree of progress made in established lines of service, while at the same time making a fine record in the newer lines of work, including crop adjustment, emergency and relief activities. The excellent results attained are an evidence of the fine leadership which has been developed in the counties and the confidence in county agents that has been established through years of work.

Programs for adjusting production of wheat, corn and hogs, and tobacco occupied a large percentage of the time and efforts of agents. Almost endless details were involved in properly filling out the many forms required and the county agents were the source of practically all information and advice relative to the many problems involved in the adjustment programs. They were leaders in developing and supervising methods for determining compliance in all of the adjustment campaigns.

Approximately 11,500 crop adjustment contracts were signed in Maryland. In carrying on this work, the agents established contact with many farmers who had not formerly been actively interested in Extension services. This was a most wholesome result from the standpoint of the Extension Service, and at the same time, it greatly increased demands upon the agents. On the whole, there probably has not been a year in the history of Extension work when the number and variety of demands made upon county agents were so great, when the services rendered were more essential, and when the value of highly trained workers in the respective counties was so greatly appreciated.

While it is not possible to state as definitely the progress made in work with other crops and commodities as is the case with those involved in adjustment programs, the agents devoted a great deal of time and effort to problems confronting producers of other crops. Marketing agreements for some products were considered; agents assisted in many conferences relative to such agreements and provided information desired by the growers to enable them to arrive at intelligent conclusions. A code for the baby chick hatchery business was adopted and education was necessary regarding its provisions and requirements. In dealing with these and a host of other problems, the county agent was looked upon as the source of information, and usually as the leader in arranging for such meetings and activities as were required.

Cooperation by county Extension forces was given to many agencies, most of which are the outgrowth of the economic conditions. Among the foremost was the service rendered in connection with various phases of farm credit. Although Maryland farmers did not experience the difficulty in arranging their credit problems as was probably the case in many sections, there were many calls for assistance and advice. In making out applications for loans from the Federal Land Bank, for Crop Production Loans, and for loans from the special credit agencies for providing funds to purchase fertilizers and seeds, a large percentage of farmers sought the aid of their county agent. In some counties assistance was given to more than 200 farmers.

Although not affecting such a large number of people, it is

not possible to estimate the value of the service rendered in connection with debt conciliation. Following the appointment by the Governor of a State Debt Conciliation Committee, similar committees were formed in each county, of which the county agent served as secretary. Cases coming to such committees for aid were those requiring some special arrangement, and in a large percentage of cases the possible loss of a farm and home was involved. It is most gratifying to state that through the good offices of these committees, plans were worked out for most of those who applied so that they could continue their farm operations and retain their homes.

In practically all counties the agents cooperated actively with relief agencies, and also with other newly formed agencies, such as those dealing with submarginal lands, rural rehabilitation, and some of the PWA and CWA projects early in the year.

As recorded elsewhere, the changes in personnel of agents and assistants were greater than in recent years. It was necessary to transfer some of the agents to new lines of work where experienced workers were essential. Each county, however, had the benefit of a full-time county agent throughout the year and there were full-time assistant agents in six of the counties. This is a record which Maryland has maintained for a number of years and is proud to continue.

Programs of Work—As in former years, a definite program for each county was outlined at the beginning of the year. In making his program, the agent has the assistance of the county agent leader and specialists and the advice of leaders representing different sections of the county and various phases of the industry. Leaders in the Grange and Farm Bureau, and also the commodity organizations, give valuable aid in planning the programs of work.

The planning of programs was more difficult than usual, due to the necessity of fitting together the work of adjustment activities and the more or less established services for which there was a great, or greater, demand than in the past. The excellent results obtained in both major lines of work is a testimonial to the success with which the programs were planned.

Economic Problems—Many of the economic problems involved in the farming industry have been made more acute by

the conditions of recent years and people have turned to their county agents in ever increasing numbers for aid and information on these phases of their business. Interest in farm management and in adequate records of farm operations has been greatly intensified by the crop adjustment programs. Records are an essential part of these programs and farmers have been made to recognize their importance. Likewise, it is not possible to make the required crop adjustments without encountering many problems in the management of farms, the use of contracted acreage, planning different rotations, and the like. Such problems require information on a wide variety of subjects and the county agent is recognized as the source from which it can be obtained. This phase of his work and his service has greatly increased.

Difficult problems have arisen with respect to marketing some of Maryland's most important farm products. The situation in marketing milk was critical during most of the year. It was vital that producers understand the conditions existing in the marketing of their products and agents cooperated with the marketing organizations in many ways to this end. Meetings were called by the agents in the several counties, when occasion demanded, to discuss various phases of the cooperative movement and specific problems and proposals confronting the particular organization.

Efforts to improve the standard of products were continued. Legislation regarding the grading and sale of certain commodities required special attention in the way of educational work, such as the new law pertaining to cantaloupes and the act providing for selling tobacco on the basis of established grades.

Sale of farm products at roadside markets continued to increase and much assistance was rendered along the line of maintaining high standards and encouraging desirable methods.

Fairs and Exhibits—Many Maryland counties hold fairs and numerous exhibits of farm products are held during the year. In all such events the county agent has a prominent part in planning, managing, and conducting the exhibit and other features associated with it. In some cases, these activities

have resulted in comprehensive pageants, particularly in Charles County, where the annual pageant has become an outstanding feature of the fair and attracts visitors from long distances.

County agents cooperated with other agencies in arranging and conducting two tours of Maryland people to the "Century of Progress" in Chicago.

Negro Work

Extension work for the benefit of the Negroes of the State was continued on practically the same scale as in recent years. In sections where most of the colored population is located, local Negro agents were employed. These include a local agent and local Home Demonstration Agent in Southern Maryland, and similar agents on the lower Eastern Shore. White agents and specialists of the force gave more or less limited service to the colored people in sections without colored Extension workers.

Programs of work are prepared each year by the Negro agents with the advice of the county agent leader. Their programs for 1934 were not affected materially by adjustment activities, but projects designed to increase the food supply for the family were given greater emphasis. The achievements of colored people in this line are very gratifying.

Excellent work was done by colored boys and girls in 4-H clubs. Garden projects were most important and were substantial aids to the food supply of many families. Poultry clubs were also important projects.

A rural short course at Princess Anne Academy has become a feature of the work with Negroes, and an annual conference for colored workers is held at the University.

HOME DEMONSTRATION WORK

MANY NEW DEVELOPMENTS during the last year had a direct bearing on home demonstration work. Some of these were the Rural Housing Survey, Civil Works program, Relief program, and the adult education program by the State Board of Education.

Due to lower income of farm families, every phase of home-making has undergone some change. Home-makers have called upon home demonstration agents to help with problems which have acquainted the agents with home conditions that in the past they did not know existed. Thus, they have been able to render greater service than ever before.

Group of Frederick County Home-Makers being instructed in account keeping by their home demonstration agent. More and more meetings of this type are held each year.

Home demonstration agents have worked very closely with county and State relief agencies, advising on low-cost diets, helping to set up community canning centers, and training leaders to help with clothing for needy families.

Programs built on "Consumer Knowledge" were continued as a regular project. As a result, home-makers are becoming better buyers, they are comparing values and know what they should receive for the small amount they have had to spend—whether it be for food, clothing, or home equipment.

Continuation of the "Live-at-Home" program had an important place in planning food budgets by farm families. The

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increased size of family gardens, more food preservation, dairy products, and home meat supply have helped materially in solving the problems incident to low income of farm families.

Renovation of clothing, including the making of coats and keeping clothing accounts, have helped keep clothing expenditures at a minimum.

Achievement Days—Ninety-one adult and 55 4-H Club achievement days were held in 21 counties. Many counties held individual club achievement days, exhibiting canned products, clothing, and home furnishing articles made as a result of Extension teaching.

At county district meetings special help was given in landscaping, picture study, upholstering, chair canning, hooked rugs, music appreciation, public speaking, and parliamentary law.

Special Projects—*Music*—Ten counties organized county-wide choruses. They have created State-wide interest in music and were trained by instructors paid from the adult education fund. Eleven counties took part in the musical pageant "The Story of America in Song." The choruses are made up from the music lovers of individual clubs. They gave concerts, put on pageants, and sang over the radio.

Cheese Making—Demonstrations in cheese making by the specialist in dairying gave women instruction which provided a method for taking care of surplus milk.

Recreation — The National Recreation Association cooperated in holding one joint recreation school for three counties, and four schools in dramatics. These schools were attended by leaders from the Grange, Farm Bureau, Home-makers' Clubs, older 4-H boys and girls, and teachers. The Dramatic Institute included demonstrations and lectures on how to produce, direct, select, and cast a play—reading the play, rehearsals, and performances.

Community Activities—Home demonstration agents cooperated in all community work with existing county agencies, such as Grange, Farm Bureau, and other groups organized for community purposes.

Emergency Activities—From January to May 1, agents in three counties were kept busy with supervision of the Rural Housing Survey. Agents in all counties cooperated with social workers and had training schools for case workers, as well as giving demonstrations to relief classes. They helped at canning centers, and assisted in distribution of food, clothing, and garden seed.

Rural Women's Short Course—Seven hundred women, representing all counties in the State, attended the Twelfth Annual Rural Women's Short Course, which the Extension Service sponsors in cooperation with the University of Maryland. The fine program, through its lectures and demonstrations in home economics and cultural subjects, gives help and inspiration to the women of the State which they cannot obtain elsewhere. The Course is diversified so as to meet the needs of all women, and is an effective project in the field of adult education.

Farm and Home Markets—A large number of farm women derived substantial income from sale of products through the medium of farm and home markets. Excellent home products are found at these markets and every product is of a high standard in quality. Both the agents and the nutrition specialist give constant attention to assisting the women in maintaining high standards.

In addition to the women who are selling on the markets, there are a number of women selling specialties direct to private trade. One woman in Baltimore County has a private trade that amounts to several hundred dollars a year. Her specialties are English plum puddings, fruit cake, date-nut bread, and orange marmalade. Other women are selling cakes, sausage, apple butter, and dressed poultry.

Every county has women selling on roadside markets who ask advice and help of home demonstration agents in standardizing their products.

Negro Home Demonstration Work—Two Negro home demonstration agents are employed to carry on the work on the Eastern and Western Shores. They carry much the same program as the white agents. Both report increased demands for help in gardening and food preservation.

Three adult achievement days and six 4-H club achievement days were held for the colored people in two counties. The enrollment in home-makers' groups and clubs was 1,313 and 958 were enrolled in 4-H clubs.

CLOTHING

DESIRE for maintaining a good standard of dress and necessity for providing clothing at low cost increased the demands upon the home demonstration force for assistance. Although the records of cost of clothing show an increase of 10 per cent in the amount spent, requests for guidance in planning and selecting clothing indicate increased interest in getting better values for the money expended.

As a result of 2,858 meetings held in connection with the clothing project, 4,056 families were assisted in using timely economic information in determining how best to meet clothing requirements. A more business-like attitude toward clothing problems and budgeting was evident by the 2,951 persons who kept records of clothing expenditures. These records indicate the economic conditions in homes by the following averages for family clothing costs: 1930—$268; 1931—$134; 1932—$93; 1933—$82; 1934—$96.

Average costs per individual showed the following increases during the last year:

	1933	1934
Father	$24.57	$35.29
Mother	36.72	46.59
Children	21.62	37.56

Since there was little money available in farm homes for new clothes, emphasis was placed on construction and remodeling of garments. Many women were proud of their accomplishments in transforming out-of-style and discarded garments into really attractive ones. There was an increase in home sewing, due partly to the increase in cost of lower priced ready-made garments. Reports were received of 7,417 women and girls who made 44,502 garments. Approximately the same number reported adoption of practices in buying which resulted in greater satisfaction in style and wearing qualities. These women estimated the value of the Extension clothing project for the year at $40,260.

Relief Work—Increase in the type and amount of relief work affected the clothing project. There was close cooperation with workers in the counties in the utilization of Red Cross material and providing garments for families on relief. Three hundred and fifty-six members of home-makers' groups made 2,029 garments for the Red Cross and county relief organizations. Other cooperation included training schools for workers and supervision of work groups.

FOOD AND NUTRITION

THERE has been a more sober, serious and personal interest than ever was evident before in the work in nutrition, food preparation and preservation. More women are applying at home the principles taught. Because money for food is scarce, more home-makers are especially careful as to the way they spend it. They are more concerned about low-cost diets and how to prepare well the foods which are less expensive in money value but good in food value.

Yearly Budgets—Home-makers have put forth every effort to find out their families' yearly food needs, to produce adequate gardens and meat animals for these needs, and to see that there was no waste. They have been much more concerned about planning, producing, and preserving in various ways their yearly food supply, where formerly they were content in planning only a season ahead. The result is more well-planned yearly food budgets, more canned vegetables, fruits and meats, and greater use of home-grown products, corn meal and flour, and better storage space.

Farm women have realized more fully the money value of farm products; they have tried to save their cash for other uses than foods, except the staples that cannot be raised on the farm, and they are buying these staples more intelligently.

Surplus farm products were used to better advantage than ever before. Many women added much needed cash to the family income by selling home-made products. Special effort was made to utilize surplus milk and meat supplies and to reduce doctor bills by consuming more milk.

Relief Activities—Extension workers and relief workers in the various organizations, both Federal and State, worked together as one body to help relieve the health and food situa-

tion in Maryland. They cooperated in planning low-cost meals, making out market orders, planning, producing and canning garden products, giving demonstrations, and in training leaders and volunteer workers to assist in community relief activities.

Some of the savings to which Extension teaching contributed are indicated by the following table. The figures are based on only the women who reported in writing and probably include less than 50 per cent of the number reached.

1,898 planned yearly food supply at an estimated saving of $15 per yearly family budget	$28,470
2,470 homes improved practices in buying food at a saving of $10 per year	24,700
240,499 quarts canned food at a saving of 10 cents per quart (Approximately ¼ meats, ¾ vegetables)	24,049
Home-produced products sold at 50% profit	74,505
Specific emergency work saving in food for relief cases	2,000
Total	$153,724

HOME FURNISHING

ACTIVITIES in this line dealt with both the practical problems encountered in improving the comfort and attractiveness of homes, and with the more special needs of those who desire to develop and utilize their skill in certain lines. Provision was made also for encouraging higher standards of aesthetic values through applications of the principles of color, design, line proportion and scale in house furnishing.

Among the subjects included in demonstrations, or other methods of instruction, were floor coverings, lighting equipment, slip covers, hooked rugs, upholstering, and refinishing of furniture.

As a result of the work done by the women, there were 885 pieces of furniture refinished; 617 chairs caned and rush seated; 632 stools made; 706 people helped with problems in making over furniture; 107 slip covers made for davenports, day-beds and couches; 383 slip covers for chairs; 1,381 people helped with problems in making slip covers; 497 hooked rugs

were reported made; 91 hooked mats or chair seats; 154 braided rugs; 37 braided mats or chair seats; 157 crocheted rugs; and 355 other people helped with rug problems.

In addition to assistance and instruction in making and remodeling furnishings for the home, the work included education designed to aid in buying new articles. Women were taught the important points to consider as to workmenship, durability, style, design, etc.

Savings through the House Furnishing activities are estimated by the specialist at more than $14,000.

GIRLS' 4-H CLUB WORK

THE RURAL YOUTH OF MARYLAND are facing the facts —lack of opportunity for advanced schooling, practically no opportunity to earn their own living, little money for new clothes, room furnishing or recreational needs. Through 4-H club programs the girls are finding it possible to continue their education at home, to earn a little money for necessities, and to find satisfaction through home-making activities and wholesome recreation.

Realizing the needs of rural youth, many community-minded women and older girls are offering their services as local leaders. Training schools are conducted to give the background necessary for successful leadership. Bulletin 72, "Building the Future of Maryland Through 4-H Club Work," was prepared for local leaders and was received with appreciation. For the first time, a series of Leaders' Training meetings was held in connection with the Rural Women's Short Course. Work was given by specialists and the Girls' Club Agent.

Clothing—Clothing work continues to be most helpful and the girls are maintaining their usual high standards despite the fact that many of the garments are remodeled or made from less expensive materials than was formerly the case. Clothing exhibited at the State Club Week showed a marked improvement. An exhibit of children's garments placed first in the National Contest and a tailored outfit placed second in the same contest.

Many people in urban areas are glad to give their partly worn garments to rural girls to remodel because they are so appreciative and take such good care of their clothes, taking pride in making them attractive at little or no cost. A great many girls are keeping clothing cost records and learning thereby to plan more wisely and economically.

Mary Myers, of Carroll County, whose exhibit of children's garments won first place at the National 4-H Club Congress in Chicago.

Foods and Nutrition—The food program is drawing a larger enrollment as girls are spending more time at home—raising their own fruits and vegetables and canning them for winter meals—and realizing the need for saving money wherever possible through their "Live-at-Home" program. The canning sent to the State Exhibit was of high standard and the jars sent to the National Contest won more than $200 in awards.

Two counties continued their school lunch program in cooperation with the Red Cross; this was the third year for this unit.

Complete outfit for a young girl, made by Miss Esther V. Will, of Carroll County, which received second place at the National 4-H Club Congress in Chicago.

A few girls and groups made money through their baking and food preservation work, and some of the older girls assisted their mothers with baking for Farm Women's Markets. Allegany and Garrett Counties clearly proved the value of food club work when 100 girls paid their way to camp for a week with vegetables and fruits raised in their own gardens, with both fresh and canned products.

Older Groups—The older youth groups continued their educational and recreational programs, including the whole community in many of their activities. Of their own initiative, these older boys and girls are asking to assist with the development of 4-H work for younger boys and girls, because they realize how much it has meant in their own lives.

With all their problems, club members and leaders are generous in their contributions of service and products for relief organizations.

With the continued help of local leaders and the growing desire on the part of young people to find educational opportunities and satisfactions through 4-H club work, we may look forward to continued progress in 1935.

BOYS' 4-H CLUB WORK

MEMBERSHIP in 4-H Boys' Clubs increased over previous years, notwithstanding the many extra duties which county agents were called upon to assume in connection with adjustment and emergency programs. Although the increase is small, it is gratifying because under the circumstances a decrease might have been expected.

The record of completed projects shows some decline, probably due principally to the fact that county agents were not able to follow up the demonstrators as closely as usual and many who attended club meetings and actually carried demonstrations through the year failed to send in their reports. The fact that a new system of reporting transfers girls working with county agents to reports of home demonstration agents is responsible for some of the apparent decline in completed projects in boys' work.

Four-H boys' club membership figures for the last eight years show a constant increase, almost doubling in that time.

Members Enrolled Under County Agents

1934	1933	1932	1931	1930	1929	1928	1927
4,343	4,317	4,037	3,738	3,387	2,752	2,625	2,211

The number reporting on their completed projects was 3,451, which is 79 per cent of all boys and girls enrolled.

These figures include only a small fraction of the enrollment of 371 in the Senior 4-H Clubs in nine counties, who met

monthly or bi-monthly during the year, and four counties working with older youth, but not holding regular meetings. Many of the boys in these clubs are still carrying very definite projects, supervised or aided in many ways by county agents and specialists. Since they are past 21 years of age, they are not reported as enrolled club members. The increase in this field does not appear in the above table.

Projects—Dairy and poultry club work still command large interest among white boys and girls; 839 boys carried dairy

Tribute is paid to the untiring efforts of local 4-H Club leaders throughout Maryland. Here we see a group in Western Maryland gathered around the dining-room table while the local leader outlines plans for the coming year.

and 895 boys carried poultry projects. Seven hundred and fifty dairy club members owned 1,445 head of cattle, practically all of which are registered purebreds and tubercular tested. That the quality of this stock is very high was shown in the exhibit of 77 head at the Timonium Fair, where individuals held high places in open classes and the club classes received high praise.

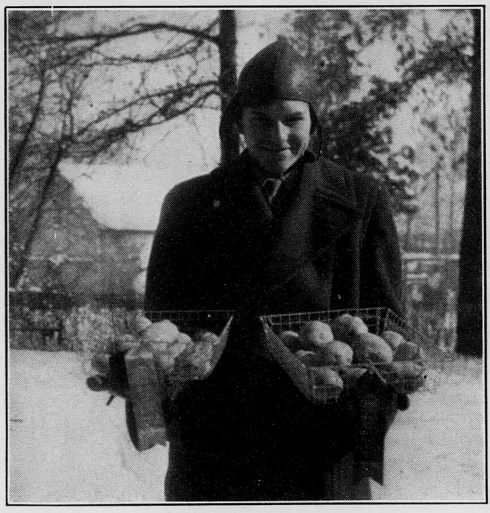
An increasing number of club poultry flocks are blood tested

for Pullorum disease and a notable increase in "clean" foundation stock was secured.

Some of the best swine in Maryland is found in herds of 4-H members. The adjustment program reduced the number of club boys who signified intention to raise swine and only 255 of the 378 who enrolled completed their projects. A considerable percentage of the 1,007 head raised by boys were consumed at home.

A start was made this year in 4-H club work with horses, 35 boys completing projects, each with one animal. In Washington County, 29 boys cared for 29 horses under direction of the county agent and animal husbandry specialist. Twenty-five fitted and trained their horses for showing at an achievement day. These boys were trained in judging horses and held a contest under supervision of the specialist.

Projects in home and market gardens showed the largest enrollment, but the lowest percentage of completions. Probably many more than 786 actually did some worth-while garden work, but failed to report. Many of the gardens were of considerable size and added much to the home food supply. Reports show some very profitable market gardens. One member had two acres of watermelons; he marketed 2,200 melons at 12½ cents, realizing a net income of $250; he also carried a dairy project.



John R. Jehle, Prince George's County 4-H Club member, with his first and third prize potatoes, which were shown at the Maryland Potato Show.

Members of potato clubs carried on some of the most outstanding work of the year, there being 212 enrolled in this project. In Garrett County, where the county agent had the coop-

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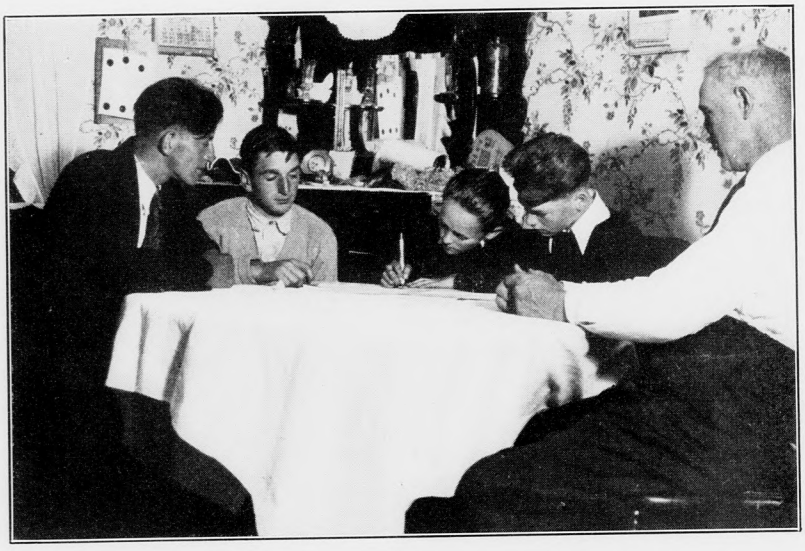

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eration of vocational agriculture teachers as local leaders, the Baltimore and Ohio Railroad, local banks, and the Extension Service plant pathologist, 37 boys produced 24,500 bushels of disease-free seed potatoes that were eligible for certification. These boys have demonstrated all improved practices recommended and that are now being followed in the county. They have been the chief means for promoting the potato industry in that section. The first storage house built according to specifications was constructed by two club boys and their father. The clubs have power sprayers which are used at maximum capacity. Excellent exhibits were made in the county and in a State potato show in Baltimore.

More than 100 acres of tobacco were grown by 196 club boys, with an approximate production of 70,000 pounds of cigarette tobacco. Some of these boys have extra quality stock and will receive top, or nearly top, market prices.

Corn growing projects were carried by 108 boys.

Inspirational and Educational Activities—Club members displayed increased interest in activities apart from their specific projects. A brief resumé shows 51 training meetings with an attendance of 880; 19 tours participated in by 343; 28 achievement days attended by 12,176; and 6 encampments with an attendance of 236. In addition, there was increased interest in State-wide events, such as Club Week at the University, Timonium Fair, All-Star meetings, State Poultry and Tobacco judging contests and exhibits, Club Leaders' Conference, and older youth conferences.

Senior 4-H Club Work—Senior groups have held many successful meetings and enlarged their programs. They have sent delegates to out-of-State meetings in Washington, Baltimore, and Richmond; have appointed a State 4-H Club Promotion Committee and secured similar committees in county councils; have aided in recreational schools; and have carried out many worth-while activities in counties, such as exhibits, banquets, camps, parties, and in one county are publishing a small club newspaper. One of the main objectives is selection of local club leaders and development of training meetings for such leaders.

A committee of this group assisted in preparing a bulletin on 4-H Club Work, "Building the Future of Maryland Through 4-H Club Work."

Negro 4-H Club Work—Garden and poultry projects, as an aid to the "Live-at-Home" program, were prominent features of the Negro club work. Records show 394 boys enrolled in poultry projects; although some confusion occurred in records of garden work, due to the change in method of reporting. It is known that these projects were substantial factors in maintaining the food supply for a large number of families.

A short course held at Princess Anne was attended by more than 100 members and nearly 200 leaders and visitors, and was by far the best held thus far.

AGRONOMY

EFFORTS during the year were concentrated on legume and soil fertility problems. Special effort to increase acreage of home grown feeds, particularly alfalfa, was continued. The plan involves taking soil samples of each field carefully, both of surface soil and subsoil and testing these samples not only for lime needs, but also for their condition as to phosphorus and potash. Phosphorus deficiency has been found quite general and to be the cause of failure or unsatisfactory yield as often as lime deficiency.

Tests and recommendations were made during the year for 280 farms, including 617 fields and gardens. More than 2,000 soil samples were tested; a large part of the testing involved pasture and alfalfa problems, either on old fields or fields that were to be put in alfalfa in 1934 or later. Much of the work, however, was in connection with other legumes and other crops.

Due to the extensive emergency work in which the Service was engaged, it was possible to establish but few result demonstrations. The total acreage of alfalfa, however, which increased from 30,000 to 34,000 acres in 1933, has about held its own during the last year in spite of unfavorable weather in part of the season. In the last five years there has been a gain of 13,000 acres.

Wheat—The work of introducing and spreading better adapted varieties of wheat was continued, principally by locating sources of good seed and by seed certification. While there was not as much demand for certification work, the demand for good seed was so large that both those whose seed was certified and those who were on the list as having good seed, sold out

early in the season. Before planting time no desirable seed was available in the State. A total of 1,360 bushels of wheat was certified and 2,560 bushels were listed as good seed. Six hundred and twenty bushels of rye were certified and 200 bushels were listed.

Barley—In the problem of producing more home grown feed, barley is an important factor. By inspection and certification, assistance was given in establishing sources of seed of the recommended variety. During the year 600 bushels of seed were certified and 350 bushels listed as good.

An indication of the progress of barley growing in Maryland is given by the following figures: The average acreage ten years ago was 4,000 acres; in 1932, 21,000 acres; 1933, 23,000 acres; 1934, 22,000 acres.

Corn—While no special campaign was carried on, improvement of the corn crop was continued by locating and establishing sources of good seed and helping growers of pure seed dispose of their seed; by judging corn shows; and by aid in handling the State Corn Show. In spite of destructive storms and unfavorable weather, there was the usual number of exhibits of fine corn at the State Show.

ANIMAL HUSBANDRY

WORK in the interests of the live-stock industry continued along the same general lines as during the last few years. Some modifications were necessary in accordance with changed conditions and due to the fact that agents and specialists had definite parts to play in connection with the adjustment programs.

Two Federal programs affecting animal husbandry were carried on—a corn-hog adjustment program, and cooperation with the Federal Relief Administration in securing pasture for cattle from the drought stricken areas of the west and northwest.

The corn-hog adjustment activities are referred to elsewhere in this report.

The Service cooperated with the NERA by securing pastures for steers, signing contracts with individuals, unloading and

delivering cattle to farms, and in delivering cattle to slaughtering plants to be processed and canned for use of families on the relief rolls of Maryland. Approximately 500 individual contracts with farmers were involved, in 20 of the 23 Maryland Counties; 13,609 steers were pastured at $1.75 per head per month; 13,466 head were slaughtered, 119 head died, 16 were missing, and 8 were turned over to local welfare agencies.

Sheep Production—Purebred ram shows and sales were the most important feature of the sheep program. Five shows and sales were held during the year; two on the Eastern Shore, two in Central Maryland, and one in Western Maryland. Owing to economic conditions, only 64 rams were sold. However, this project continues to reflect its value in the gradual improvement of lambs and wool in the State. The mere fact that last year was the ninth consecutive year for this project speaks for itself. It is sponsored jointly by the Extension Service and the Maryland Stockmen's Association.

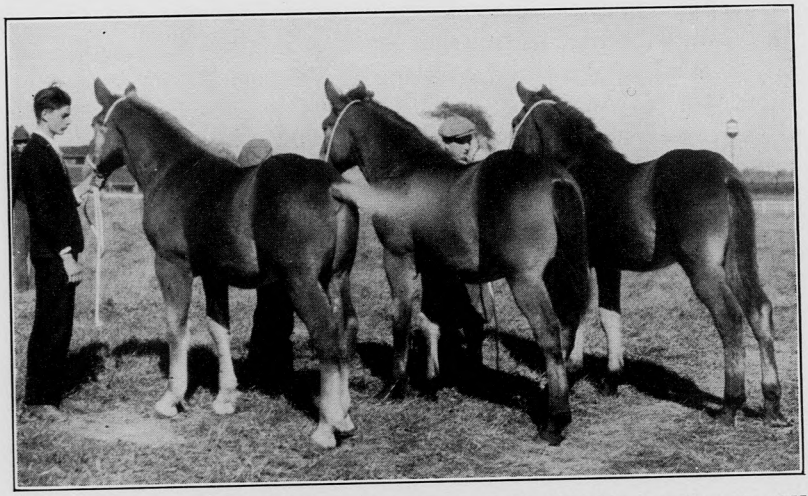
Beef Production—For the last few years increased interest has been evident in beef cow herds, both grade and purebred. Particularly is this true of the Aberdeen-Angus breed. Angus breeders have a live, active breed association and through their efforts, in cooperation with the Extension Service, this breed has continued to increase in number and quality. An educational exhibit was made in connection with the Baltimore Live-stock Show and young heifers and bulls were offered for sale at private treaty.

The Second Annual Aberdeen-Angus Show, held in Harford County, brought out about 75 splendid specimens of the breed from 10 or 12 herds. All of the animals were under two years of age and competition for them was keen.

As an evidence of the fact that Maryland breeders intend to continue improving, Wickwire Farms, Earleville, Maryland, imported from Scotland late in the year a proved sire and a half dozen highly bred heifers.

Swine—In accordance with the hog adjustment program, swine extension work in established lines was given less emphasis. The litter contest was discontinued temporarily, but assistance was given through feed and management demonstrations and meetings. Swine sanitation was stressed particularly.

Horses—An outstanding feature of the year was the increased interest in horse breeding. Numerous calls were received for assistance in selecting breeding stock, both stallions and mares, and the specialist rendered valuable service in that line. The increased interest extended also to subjects pertaining to feeding and management of horses and calls for information and meetings greatly exceeded recent years.



Some of the purebred Belgian colts shown at the Washington County 4-H Colt Club Show, which was held in connection with the Hagerstown Fair. This is said to be the first colt project sponsored by a 4-H Club in Maryland.

A 4-H Colt Club with 32 members was conducted in Washington County. Twenty-eight colts were shown by their youthful owners at the Hagerstown Fair. There is prospect that the growing interest in horses will result in a number of colt clubs during the coming year.

HORTICULTURE

WORK with fruits was designed primarily to improve the size, color and quality of the crop, and to reduce the production of cull and off-grade fruit.

With short crops in some orchards, to which were added impaired rural credit, lack of capital, and uncertain market

outlook, all of which was further complicated by drought and almost total loss of the peach crop, growers were encouraged to cut production costs. Measures advocated in this line included reduced cultivation, use of summer cover crops, economy in use of fertilizers, and consistent thinning of fruit. However, more thorough spraying, and even more spraying, were advocated, due to weather conditions.

Again, the growers were urged to remove all weak trees and unprofitable varieties, and much progress was made in tree removal.

In addition to the demonstrations and advisory visits pertaining to pruning, thinning, fertilization, and soil improvement, some new projects were begun. These included thinning to influence annual bearing of apples, pruning of peaches to improve color, and also a project in determining the cause of cull apples in various orchards. Codling-moth injury and limb bruises due to insufficient pruning or thinning were found to be the main factors in causing culls.

Some work had been planned with strawberry growers, but the market was such that interest could not be aroused. This work will be planned for 1935.

The last year was unusual in the generally fine quality of the apple crop, due to better spraying methods, as well as unusual weather conditions. The apple crop was short in some sections of the State and unusual quantities of the fruit were placed in storage. The market was steady, but not high in price. The peach crop was frozen, but Maryland's crop amounted to about 10 per cent of normal.

ORNAMENTAL GARDENING

A NEW APPROACH to the problem of helping home-makers with development of their home grounds was organized during the year.

Improvement of Home Grounds—The plan is based upon the idea of achievement, rather than upon rivalry of the usual garden contest. In this respect, it resembles the 400-bushel potato clubs and the ten-ton tomato clubs.

The improvement program is divided into ten phases and

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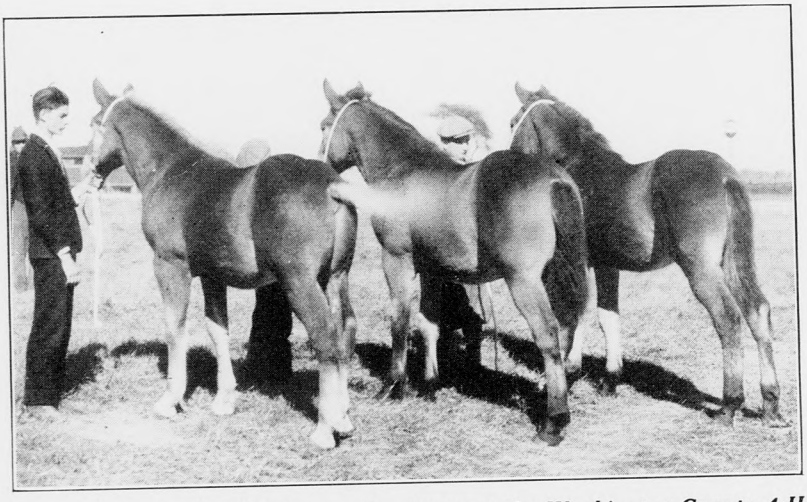

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Improvement of Home Grounds—The plan is based upon the idea of achievement, rather than upon rivalry of the usual garden contest. In this respect, it resembles the 400-bushel potato clubs and the ten-ton tomato clubs.

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each cooperator is expected to concentrate upon one thing each year. County committees will determine when a cooperator is entitled to receive a certificate and this will be based upon interest manifested and actual work accomplished, rather than upon technical perfection of results. This is necessitated by the desire to keep the project as simple as possible. Each home owner makes some attempt to improve the appearance of his grounds and it is believed that with such help as can be rendered by the Extension Service, together with information and help from other sources, the cooperator will make a better job of his landscape development than would be possible without such assistance.

For general guidance, a four-page circular has been issued for each of the ten phases, under the following titles: (1) General Arrangement; (2) Driveways and Walks; (3) Planting and Care of Lawns; (4) Use of Trees; (5) Foundation Planting; (6) Boundary Treatment; (7) Screen Planting; (8) Entrance Features; (9) Use of Architectural Features; (10) Special Developments.

Relief Work—The year has presented numerous opportunities to render service in connection with unemployment relief. Due to the amount of good that could be accomplished in proportion to the effort expanded, these opportunities were looked upon as quite important. The majority of these cases were for drawing up CWA projects, having to do with various phases of land development, preparation of necessary plans, and supervision of the work as far as possible. Such projects numbered about eleven, employing approximately 135 men for an average of 50 days, and included park construction, playgrounds, school grounds, and athletic fields.

Landscape Plans and Advice—The number of requests for landscape assistance and demonstrations did not increase over the number handled in 1933, due in part to absence of the assistant specialist in connection with a special Federal project. One-hundred and ninety-four formal requests were received, 43 being schools and playgrounds, 97 home grounds and farmsteads, 6 parks, and others of a miscellaneous character. Fifty-five plans were prepared.

Schools and Short Courses—Specialists cooperated with the College of Agriculture in holding short courses for special

groups, including florists, nurserymen, amateur gardeners, and the Rural Women's Short Course. Other groups aided were the FERA, the CCC, two special groups in Prince George's County, and several schools in connection with improvement of their grounds.

Miscellaneous Activities—These included judging flower shows and exhibits; assistance in staging exhibits at the Baltimore Flower Show and other places; 84 public addresses, mostly illustrated with slides; and a number of radio talks. Publications included monthly information letters on ornamental gardening, a monthly letter to all members of the Maryland Vegetable Growers' Association, articles for the press and a number of circulars.

DAIRY HUSBANDRY

REFERENCE is made elsewhere in this report to the problems encountered by milk producers in marketing their products and the assistance which was given them by the Service in meeting the complex issues. Although the results of efforts in that field are less tangible than some of the other lines of work carried on during the year, they were vital to the welfare of those engaged in this important phase of Maryland agriculture. Each of the three cooperative associations handling the products of dairymen in this State experienced difficult situations during the year. Recognizing the valuable service which these associations have rendered to their members and to the industry as a whole, extension workers, both specialists and county agents, have given them every assistance possible.

Herd Improvement Work—Supervision was furnished for regular testing of cows entered in Herd Improvement Associations, and records were kept of about 5,000 cows. One new association was formed in Montgomery County and began testing early in March. The average production for all associations completing twelve-month records was 7,050 pounds of milk and 301 pounds of butterfat.

The State Guernsey, Holstein, and Jersey Breeders' Associations award each year a silver trophy to owners of herds in their respective breeds making highest production of butterfat. These honors this year went to Richard Blackburn of Ridgely,

for Guernseys; to Walter E. Kriel of Hampstead, for Jerseys, and to H. O. Norris of Annapolis, for Holsteins. The trophies were presented at the summer meeting of the Maryland State Dairymen's Association.

Bulls Placed—An important need of the dairy industry is more and better bulls. Extension records show more than 200 purebred bulls placed in the herds of the State. Some of these were bought at private sales and others through bull sales to which assistance and encouragement were given.

Dairy Judging Teams—Seventeen 4-H judging teams competed in the contest at the Timonium Fair, and a number of teams participated in contests at other fairs, exhibits, and field days. The fact that there were two more teams competing in the State contest than in 1933 shows continued interest and progress in this phase of the work.

Field Days—Every assistance was given to breed associations in holding Field Days and nine such events were held during the year, at which approximately 400 cattle were shown. These field days have become a permanent part of the program of all breed associations in the State and have had a marked influence on the improvement in type of cattle. The field day

A group at the Eastern Shore Holstein Field Day, held at Tolchester during the summer.

has helped materially many times in selling outstanding animals for good prices.

Maryland was honored by being chosen as the place for the meetings of the American Holstein Breeders' Association. This is a fitting tribute to the breeders of that important breed of dairy cattle in this State and recognition of the progressive spirit of Maryland Holstein breeders.

Advanced Registry Testing—With an upturn in the cattle business, as indicated by increased prices at public auctions and private sales, there was an increase in Advanced Registry testing during 1934. The total number of cows tested this year was 597 greater than in 1933, or an increase of 10 per cent. All breeds except Guernseys showed an increase in number of cows on test. During the year an average of 34 herds, with an average of 579 cows were tested each month. Two hundred and sixty-four Advanced Registry records were completed.

An unusual number of outstanding records were made during the year. One new world record was made by the Maryland cow, Maggie's Snowdrop 291368, owned by Pioneer Point Farms, Centerville, Md., which completed a record of 14,431.3 pounds of milk and 668.2 pounds of fat. This cow milked 81 pounds of milk a day, which, so far as we know, is the highest milk production for one day for the Guernsey Breed. New State records were established by a Guernsey cow owned by Thomas Marsalis, Queenstown; by a Jersey cow owned by John C. Letts, Bethesda; and by an Ayrshire cow owned by Folly Quarters Farm, Ellicott City.

Miscellaneous Activities—Considerable attention was given to instruction and demonstrations on making Cheddar cheese. As a result of this work, quite a number of farm women are now making this type of cheese and finding it a practical method for utilizing some of their surplus milk.

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MARKETING

ACTIVITIES in the field of marketing farm products have covered a wider range of efforts than in any former year. The major lines of work, such as grading and standardization of products, market reporting, and cooperation with marketing organizations, were continued and, in some cases, were expanded. In addition, there were calls for service in many other phases of the problems associated with marketing the widely diversified farm products of the State.

Cooperative Marketing—Rapidly changing economic conditions have presented many difficult problems to the cooperative marketing associations operating in Maryland, but their service to their members has been of greater value than in more normal times. The three associations handling the milk of Maryland dairymen—the Maryland State Dairymen's Association, the Maryland-Virginia Milk Producers' Association, and the Inter-State Milk Producers Association—have faced critical situations during a large part of the year. Likewise, the Maryland Tobacco Growers' Association, the State Wool Pool, and the Maryland Agricultural Corporation, have all been forced to deal with new and complicated problems. It has been the policy of the Extension Service to assist these organizations in every way possible, in order that they may continue to render to their respective members the service they desire, and that the benefits of cooperative effort may be more thoroughly established and extended in the State.

Grading and Standardization—Inspection and certification at shipping point included the growers and shippers of 90 per cent of the commercial Irish potato crop; 85 per cent of the commercial growers and shippers of apples; and such miscellaneous fruits and vegetables as peaches, cucumbers, cantaloupes, green wrapped tomatoes, string beans, sweet potatoes, and strawberries, the volume of these products depending largely upon crop and market conditions.

In addition, 4,100 bushels of Irish potato seed were tagged and sealed for growers in five counties; 500 pounds of tomato seed was certified for the Tri-State Packers' Association; 507,635 baskets of tomatoes were graded and inspected for 14 canners; 200,000 dozens of eggs were inspected and certified for 35 producers in five counties; 16,000 birds from 50 poultry flocks

were certified and banded; 600 gallons of maple syrup were inspected for the Garrett County Maple Products Association; and 11,234 pounds of domestic rabbit meat was inspected for 87 producers.

Market Reporting—A daily market report on fruits, vegetables, butter, eggs, and poultry was furnished to the Baltimore press and to a mailing list of between 900 and 1,000. Conditions in the Baltimore Live-stock Market were broadcast twice weekly over Station WBAL, in cooperation with local agencies and the U. S. D. A. A Market News Letter was issued monthly.

Farm Markets—Regular inspections were made of 11 roadside markets for the Maryland Farm Roadside Market Association, and such supervision was given as is required for display of the official roadside market sign. Assistance was given also to county and home demonstration agents in establishing and maintaining local markets for the sale of home and farm products.

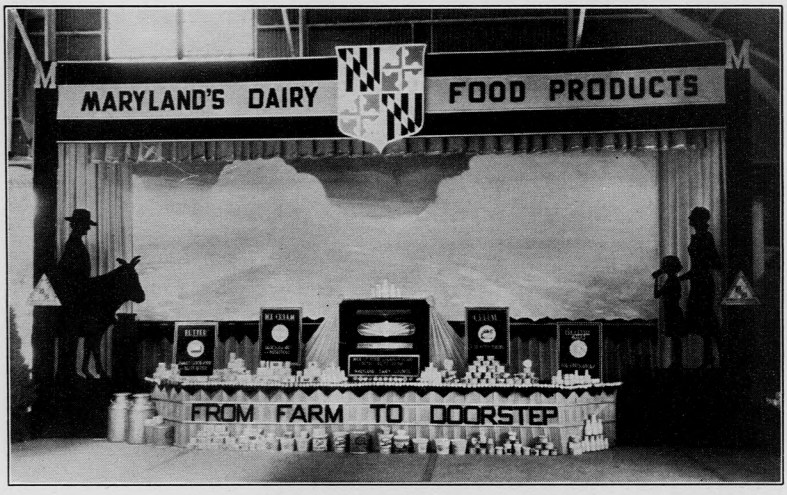
Development of New Outlets for Sweet Potatoes—Under a cooperative agreement with the United States Department of Agriculture, a program was inaugurated, which it is hoped will result in new and larger markets for this commodity. A representative of the Wicomico County growers was in London for a few weeks establishing trade contacts, and demonstrating the use of the product. One thousand five hundred bushels of sweet potatoes were shipped to England from Salisbury, which were officially inspected and certified by the Maryland State Department of Markets.

Miscellaneous Activities—Cooperation was given in the purchase of 121 cars of Irish potatoes by the Federal Relief Administration at a time when such stimulus to the market resulted in substantially better returns to growers.

At the request of the Farm Credit Administration, a study of motor truck transportation was conducted in which 415 individual farms were visited and records made.

In cooperation with the Live-stock Sanitary Service, 49,000 birds in approximately 150 poultry flocks were blood tested for Pullorum disease.

More or less attention was given to special problems surrounding the marketing of a number of products. Among these were included conferences and observations with respect to the new tobacco law and training of graders; securing information as to available supplies of hay in response to out-of-State inquiries; studies of the situation in regard to marketing spinach and kale; studies of quality and grade of strawberries for manufacture; studies made with a view to establishing grades for fresh fish; a survey of the general can-



The University of Maryland exhibit at the annual Timonium State Fair, which was prepared by the Extension Service in cooperation with the Baltimore Dairy Council.

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Cooperation was given many organizations and individuals in connection with hearings and conferences concerning marketing agreements for milk, canned tomatoes, Irish potatoes, and tobacco. Also, to the Inter-State Early Potato Committee in holding outlook meetings and in development of and application for a marketing agreement.

POULTRY HUSBANDRY

DEVELOPMENTS in the poultry industry, particularly the adoption of a National Commercial and Breeder Hatchery Code early in the year, necessitated much greater attention to certain phases of this industry than has been given in former years. Nevertheless, it was possible to continue and register substantial progress in the established lines of service.

The chief problems of the industry on which effort was focused during the year include the following major subprojects: 1. Hatchery Chick Production Adjustment; 2. Hatchery and Hatchery Flock Improvement; 3. Poultry Management and Cost Accounting; and the following minor subprojects: 1. Turkey Breeding and Production; and, 2. Boys' and Girls' 4-H Poultry Clubs.

Hatchery Chick Production Adjustment—Following the adoption of a National Code governing the hatchery industry, the Extension Service took the leadership in educational activities necessary to familiarize those who were subject to its provisions, its operation, etc. A State meeting was held in January and this was followed by a series of county and district meetings for the purpose of organizing the educational work and assisting is setting up compliance committees. Twenty-five such meetings were held, extending into all sections of the State.

Later in the year, the specialist cooperated with compliance committees in holding another series of meetings in connection with local compliance matters, and to determine the attitude of hatcherymen regarding the effect of the Code.

Hatchery and Hatchery Flock Improvement—This work was conducted in cooperation with the Maryland State Department of Markets, the State Live-stock Sanitary Service, and the State Poultry Certification Board. Among the factors to which special attention was given were quality of stock, sources of purchased males, hatchability of eggs, Pullorum disease eradication, sanitation, and hatchery flock-owner relationships to promote effective cooperation in mutual interests.

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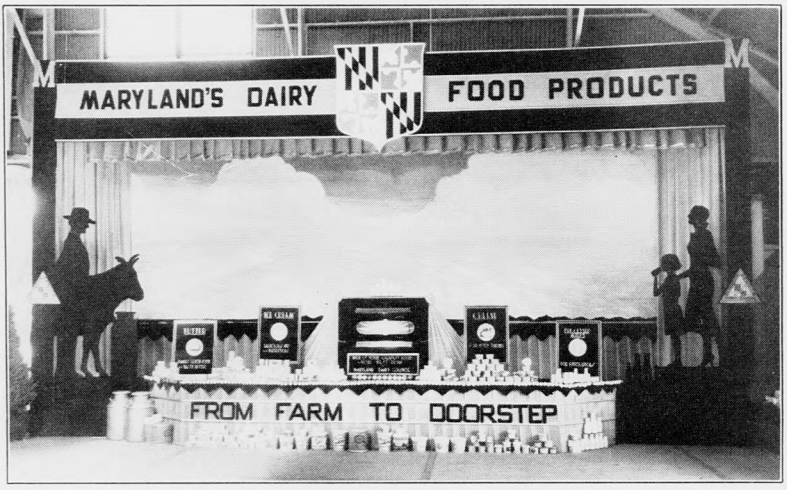

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Turkey Breeding and Production—An unfavorable ratio between costs of feed and market prices for turkeys made 1934 a relatively poor year financially for Maryland turkey growers. Weather and growing conditions were more favorable than in 1933. Extension activities were designed primarily to assist

These turkey growers recognize clean range and plenty of green feed as essentials in production of healthy poults. The flock in the upper picture is on the farm of R. L. Linkous, Pylesville, and the lower is on the farm of J. Harry Davis, Street, Md.

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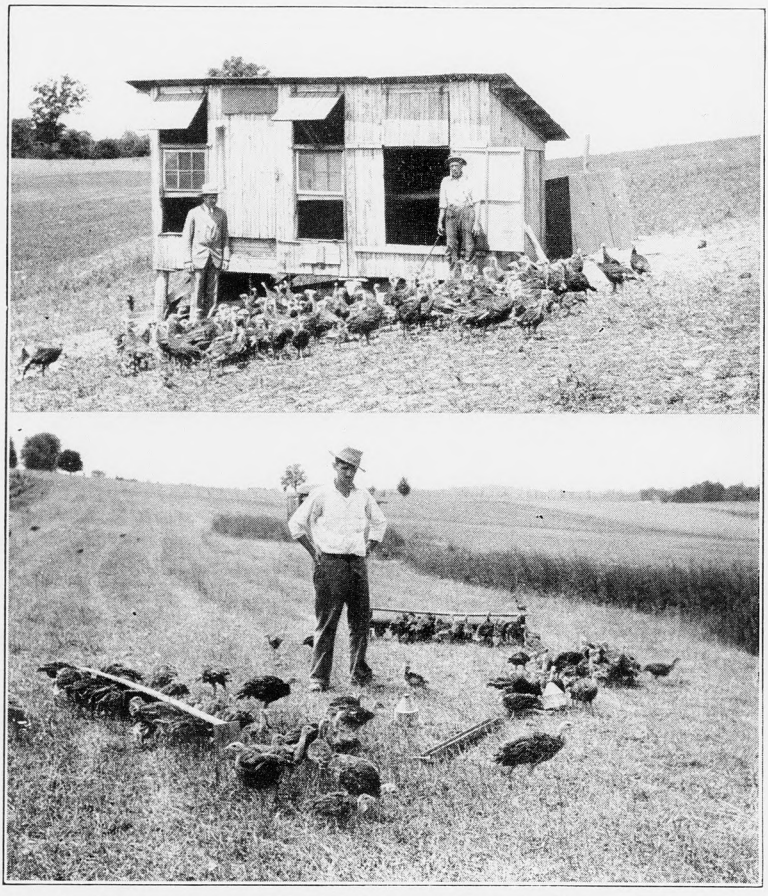

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ENTOMOLOGY

EXTENSION activities in Entomology presented some outstanding results during the year.

Codling Moth—An effort was made to control the codling moth and at the same time prevent excessive residues remaining on the fruit at harvest time. The codling moth situation was slightly better than in the last two years, probably due to more general use of sanitary measures and, in some cases, more thorough and timely spraying. The average percentage of fruit free from codling moth in 29 commercial orchards was 83.74 per cent.

Culling and Washing Tomatoes—Efforts to secure better culling and washing of canning house tomatoes, based on investigations of the previous year to determine causes of the presence of larvae of Drosophila in canned tomatoes, were quite successful. A great many canners utilized the diagram of a satisfactory washing set-up and followed suggestions in regard to better practices that were sent out by the combined forces of the Federal Government, the States of Maryland, Delaware and New Jersey, and the Tri-State Packers' Association. Cooperation developed in this activity showed the possibilities when work is organized on a regional basis.

Potato Tuber Moth—Surveys showed that the potato tuber moth had extended its activities into Anne Arundel and Calvert Counties, in tobacco, as the tobacco split worm. Adherence of Eastern Shore growers to the practices recommended by this Service held the infestation of the pest in early potatoes to a minimum.

Japanese Beetle—The fight against Japanese beetle continued along the same lines as were followed during the last few years. An educational campaign to acquaint farmers, county agents, and specialists with the injury possible from this pest centered around a tour to the heavily infested area in

Maryland farmers, specialists, and county agents tour Southern New Jersey to observe the injury done by Japanese beetles. In the upper picture the group has stopped to see the work of the beetles in a corn field. The lower picture shows a ten-gallon trap located in a nursery. It was reported that this trap was emptied six times in one day, making a catch of about sixty gallons of beetles.

New Jersey. In the control campaign, consisting of the operation of 10,000 traps, considerable newspaper publicity was used to acquaint the people with the means of controlling the Japanese beetle.

Mosquito Control—During the winter, two members of the staff, Mr. Graham and Mr. Crosthwait, were given leave of absence to devote full-time to the anti-mosquito project under funds provided by the Civil Works Administration. Two other members of the staff, Dr. Cory and Dr. Langford, devoted approximately two months to supervision of this work. This project served as a large-scale demonstration of what can be

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done in tidal marsh areas by proper anti-mosquito ditching; that this is true is borne out by contact with people in the area where the work was done. A large volume of newspaper publicity attended this campaign. Several areas continued anti-mosquito work under public and private funds. A total of 174 miles of new ditch and 29.5 miles of old ditch was constructed and cleared. This furnished anti-mosquito ditching on 3,335 acres.

Pea Aphis—Three years of demonstrations on control of the pea aphis on the canning crop in Garrett County have resulted in a continuation of the growing of peas, which seemed to be doomed at the time the demonstrations were begun. It has been shown that spraying with nicotine and soap can be done on a profitable basis and consequently several canning companies have found no difficulty in securing sufficient acreage to carry on their operations.

Termites—Termites have been reported much more frequently during the last year than in previous years. No doubt this is due to general information that has gone out from the Federal Government and private agencies in regard to possibilities of termite infestations, making people more or less termite-conscious. Up to the present, no effort has been made to put the termite work on an extension basis, but each individual case was handled on a service basis by supplying literature and advice.

APICULTURE

WHILE the beekeeping industry has been for years a well established, paying side line for both rural and urban people in Maryland, there are relatively few large scale beekeepers. When all factors are considered, it is the belief of experienced beekeepers that honey production pays better than most enterprises available to the man in moderate circumstances. It has been the aim of extension work during the three years of its existence to encourage side line beekeepers to expand their projects to commercial proportions.

Educational Work—Through meetings, demonstrations, and particularly by personal visits to apiaries, the following fundamentals in beekeeping were emphasized: (1) Value of good

queens; (2) Necessity for movable frame hives; (3) Efficiency of the two-story brood chamber; (4) Necessity for eliminating disease; (5) Value of keeping accurate records; (6) Winter preparation and spring management; (7) Value of properly grading and packaging honey. To this list might be added other phases of bee culture in which instruction was given when needed.

Disease Control—Inspection work was carried on this year more vigorously than in any previous year. When disease was found, the apiary operator was thoroughly grounded in the method of diagnosis and treatment. With very few exceptions, beekeepers cooperated with efforts to eradicate disease.

Orchard Pollination—While it was necessary to limit this work to those who requested aid, a number of fruit growers were assisted. In two large commercial orchards, capable apiary managers were secured and trained to operate the fruit growers' apiaries. Considerable time was spent in helping beekeepers adjacent to fruit growing areas in building up apiaries large enough to be of value to orchardists who will desire to rent bee colonies in the future.

Maryland State Beekeepers' Association—Close cooperation was given to this organization in all of its activities during the year. One new chapter of the association was organized and plans are underway for the formation of two more chapters early in the coming year.

PLANT PATHOLOGY

CONTROL of destructive plant diseases involved work with most of the principal crops grown in Maryland to the extent that resources would permit. Increasing effort to produce high-quality products is resulting in a corresponding increased interest in preventing damage by disease.

White Potato Diseases—Work with this crop was focused primarily on assisting growers to produce seed that was eligible for certification. The demand for inspection was greater than ever before, with the result that 94,712 bushels of potato seed grown on 588 acres were eligible for certification, compared with 72,572 bushels from 378 acres the preceding year.

Use of Maryland certified seed potatoes is increasing in all parts of the State and is benefiting commercial growers as well as producers of certified seed. One entire potato growing community in Frederick County has adopted the practice of purchasing certified seed from Garrett County to replace their home grown uncertified seed, which they planted formerly. Demonstrations show that their yields were increased 100 to 150 bushels per acre and that the potatoes grown are of better quality and bring higher prices on the market.

Maryland had a fine crop of certified seed potatoes this year. This field was on the farm of F. J. Dukes, near Girdletree.

Other work with white potatoes included demonstrations of spray materials and methods, and the production and maintenance of seed stocks.

Orchard Diseases—To reduce the loss from fruit diseases, which in Maryland is estimated to amount to between 10 per cent and 20 per cent of the crop, a spray service has been maintained for a number of years. Through this service, orchardists are informed as to the time to spray for best results, material to use, and most approved practices. Careful observations are made as to the development of apple scab fungus and other disease producing organisms, and orchardists are advised as to the best time to spray by means of cards sent from offices of county agents.

Sweet Potato Diseases—As a result of demonstrations on seed treatment and bed sanitation which have been conducted during the last few years, improved practices have been adopted by a large percentage of sweet potato growers. As a result, loss from blackrot is no longer very large and is tending to decrease. Without these practices, loss would unquestionably increase with great rapidity.

Demonstrations of control methods for stem rot and pock were other phases of the work with sweet potatoes. Progress was made also in control of sweet potato diseases by use of certified seed. Twenty-eight acres of sweet potatoes produced 4,200 bushels that were eligible for certification in 1934.

Tobacco Diseases—Control of diseases of the tobacco crop depends largely upon the practice of sanitation in management of seed beds and adoption of a regular program of seed bed spraying with Bordeaux mixture. Wherever it can be done economically, seed bed sterilization with steam is recommended. Adoption of these measures by growers has kept the damage from wildfire, mosaic, and other diseases to a low percentage. Downy mildew has presented a problem in recent years but a spraying program recommended by the Service is proving successful in its control.

Cereal Diseases—Seed treatment of barley, oats, wheat, planting of scab resistant varieties of wheat in the more humid areas where the disease is likely to occur, and care and selection of seed corn were the principal lines of activities in this field. Demonstrations of approved practices were continued and are becoming regular procedure of a large percentage of growers.

Diseases of Other Crops—Among disease control practices demonstrated to growers of other crops are: Use of Western grown bean seed for control of bean anthracnose; use of yellows resistant varieties of cabbage; use of varieties of watermelons resistant to wilt; spraying and dusting of cantaloupes, cucumbers and watermelons for control of blight, anthracnose and other diseases; and use of wilt resistant tomatoes.

FORESTRY

THE PROGRAM for Forestry extension work outlined at the beginning of the year was changed materially in order to deal with a number of emergency demands. The work carried on included five principal lines of activity: (1) Reforestation; (2) Marketing and Utilization of Forest Products; (3) Junior Forestry; (4) General Educational Work; and, (5) Submarginal Farm Land Investigations for State Land Use Programs.

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Reforestation—Work in this line was conducted principally through planting demonstrations. Many of these were in the nature of plantings for special purposes and were well attended. Due to the fact that they were held before some of the emergency activities occupied the time of the specialists, the program was carried out as planned.

Marketing and Utilization of Farm Forest Products—This phase of the work took the form of conferences with sawmill operators, lumber dealers, and others regarding application of the NRA code and its effect upon the Maryland forest industry. A Forest Products News Letter was issued three times, containing reports on prevailing prices and market conditions for Maryland forest products.

Junior Forestry—This is a rather new activity in this State and was carried out at 4-H club camps, where a number of

Members of the Corrigansville 4-H Forestry Club inspecting the Green Ridge State Forest in connection with their tree identification studies.

talks, demonstrations, and field trips were given. The subject was well received by 4-H club members and should be continued and extended in the future.

General Educational Work—Although greatly curtailed by emergency activities, a large amount of educational work was

carried on, covering a wide range of problems pertaining to forestry. It was done through lectures, letters, press articles, and personal contacts with individual owners of woodlots.

Sub-Marginal Farm Land—Work in this line was not planned in making up the program for the year, but claimed a large percentage of attention. Much time was devoted to inspection of areas thought to be sub-marginal in character. This was brought about by the State's participation in the Federal Land Use Plan, which calls for purchase and retirement from cultivation of farm lands not suited to profitable production of agricultural crops.

Preliminary examinations were made with members of the University Soils Department and representatives of the State Roads Commission, and National Park Service. Sites which seemed qualified by these preliminary examinations were further investigated to determine exact details. These findings were drawn up in report form and presented to the Maryland State Planning Commission. Some investigations are still in progress and more remains to be done in the coming year.

CANNING CROPS

DEMONSTRATIONS with the principal canning crops were conducted in all counties where these crops are of major importance. Both growers and canners showed increased interest, due largely to improved conditions resulting from short packs of canned foods in 1932 and 1933. Prices of canned foods and raw products were higher and acreages of all crops grown for canning were increased.

Weather conditions were unusually favorable for peas and lima beans, resulting in the largest yields of these crops in a number of years. The season was not favorable for sweet corn, beans and tomatoes, and these crops yielded less than average.

Snap Beans—A variety demonstration with snap beans was conducted at Ridgely for the third consecutive year to determine the varieties best adapted for the canning industry in Maryland, as well as to furnish a visual demonstration for canners and growers. It has been shown definitely that

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several varieties are not suited to Maryland conditions, while others have yielded well consistently.

Publicity was given to the advantages of western-grown seed over that produced in the eastern and mid-western states, from the standpoint of freedom from diseases.

Circular No. 104, "Producing Snap Beans for Canning," was prepared by the canning crops specialists and distributed to growers.

Peas—Six variety tests and demonstrations with peas were conducted in cooperation with the Experiment Station, to compare the yield and quality of selections commonly grown with certain new strains and varieties. A number of new strains of Alaska, some of which were developed at the Maryland Experiment Station, gave decided increases in yield. Two of the new early sweet varieties yielded well in comparison with Alaska and are of better quality.

Fifty-five lots of seed stocks sent to Maryland canners by seedsmen were grown in a field test, all of which were of satisfactory quality. It is planned to run this demonstration each year as a trial ground where canners may compare their seed stocks with those received by other canners in the State. This should be an incentive to seedsmen to send better quality seed to Maryland canners.

Sweet Corn—Variety demonstrations and hybrid trials were conducted in cooperation with the Experiment Station at Ridgely, College Park, and New Windsor. All of the common canning varieties of corn were grown in comparison with the most promising hybrids of these types. In addition, demonstrations with hybrid corns were conducted with a number of canners. The performance of Golden Cross Bantam hybrid was outstanding, yielding high consistently, compared with Stowell's Evergreen and the other open-pollinated varieties used by canners.

Assistance was given one canner in selecting stock seed for his seed acreage, and work was continued towards improvement of a selection of Narrow Grain Evergreen, which has shown some promise in certain localities.

Tomatoes—A variety demonstration was conducted at Ridgely to determine the yield and quality of several new varieties

and selections in comparison with those commonly grown. In general, the standard varieties gave best results. Demonstrations were conducted also on 61 farms, using either the Marglobe, Pritchard, or Tri-State Baltimore variety in comparison with the variety commonly used by each grower. Marglobe and the Baltimore types have generally given best results.

The specialists cooperated with the Tri-State Packers' Association in improvement and stock seed production of both Marglobe and Tri-State Baltimore varieties, and in saving and certification of Marglobe seed. Due to unfavorable weather, only 737 pounds of seed were saved for certification.

More than 6,000,000 plants were produced in approximately 450 cloth-covered coldframes of the type advocated by the Service. County agents circularized 2,773 growers with illustrated letters and a circular prepared by the specialists.

Thirty million southern-grown tomato plants, or enough to set about 18% of the acreage, were used by Maryland growers this season. Specialists of the Service have cooperated with members of the Georgia Experiment Station for a number of years in determining the best seed treatments and sprays for use in production of plants for setting in Maryland.

Fruit tagging studies were continued for the third year to determine the actual quality of tomatoes in the field. Determinations were made of fruits reaching the different grades, as well as the reasons for the lower grades.

The Ten-Ton Tomato Club was conducted for the seventh year. Two hundred growers were enrolled, but, due to unfavorable weather, only six qualified by producing ten tons or more to the acre.

TOBACCO

THERE were a number of important developments in the work in behalf of the tobacco industry during the year. Early in the year, Mr. W. B. Posey, who has served as specialist in this field for the Extension Service, was granted a leave of absence to assume the duties of General Manager of the Maryland Tobacco Growers' Association. He was succeeded by Mr. P. D. Brown, who has had wide experience with tobacco work in Southern Maryland.

The Maryland Tobacco Grading Law passed by the last General Assembly was placed in effect on the Baltimore market. Many problems arose in connection with its operation and the Service was called upon for a great deal of assistance in the way of educational work pertaining to the new law, training graders, and other features of the new method of marketing tobacco.

At a meeting of all tobacco interests, including buyers, sellers, growers, warehousemen, Extension workers, and specialists of the U. S. Department of Agriculture, a study of the entire Maryland tobacco industry was authorized. The tobacco specialists, county agents in the tobacco growing counties, and others of the Extension Service had an important part in making this comprehensive study.

Production Adjustment Program—During the year an acreage and marketing reduction program was conducted in cooperation with the Agricultural Adjustment Administration. This program was not applicable to all growers in this territory and the amount derived from a processing tax was only sufficient to permit a sign-up of about 40 per cent of the acreage. The contract was designed to be most attractive to those who had been receiving low prices and producing a crop containing a high percentage of low grade tobacco.

This program resulted in 695 contracts. The total number of acres taken out of production was 1,767.1, and the first rental payment to farmers was $35,234.

Cultural Activities—Lines of work carried on in former years were continued, with a view to aiding farmers to produce tobacco of salable quality and reduce the cost of production. Among the practices which were emphasized were: (1) Improved seed beds; (2) Adoption of suitable varieties; (3) Methods of soil improvement; (4) Better field cultural practices; (5) Disease control; (6) Better housing; and, (7) Improved methods of stripping and grading. Although it is difficult to evaluate progress in these lines of work for a single year, because of variation in seasons, decided progress is quite evident when a period of several years is considered.

Marketing—Some of the efforts in connection with marketing the crop have been mentioned. In addition, close cooperation

was given the Maryland Tobacco Growers' Association in its various problems. Farmers were encouraged to market their tobacco through this organization and to consign their tobacco to the State Warehouse, which is owned and controlled by the State and growers. Efforts were made to arouse more general interest in the application of grading to Maryland tobacco, to establish packing houses in the several counties, and other phases of marketing.

ECONOMICS AND FARM MANAGEMENT

MOST of the work in this field during the year was associated directly or indirectly with adjustment programs and is summarized elsewhere. A major feature of all the adjustment campaigns was the educational work done in presenting to farmers the economic reasons for such programs and in pointing out the farm management adjustments that were involved.

The shifts in production which are taking place have greatly increased the demand for assistance and advice in dealing with farm management problems that such adjustments necessarily bring about. With less emphasis upon cash grain crops and greater stress upon production of feed grains, hay, and pasture, farmers encountered a new set of problems and sought aid from agents and specialists.

The major objective in this line of work was lower cost of production, economy in cash expenditures, greater diversification as to source of income, good crop yields from fewer acres, high production per animal, and a "live-at-home" program.

Another major feature of the adjustment programs was the stimulus they gave to keeping adequate farm records. Many farmers realized that they were penalized financially because they could not support their claims for a "base" by accurate records. In response to the demand from farmers, more than 150 farm analysis type record books were distributed. Many of these completed records were analyzed as a basis for improved farm practices.

The AAA made available 10,000 farm record books, which were distributed through the county agents to producers

under adjustment contracts and to other farmers who asked for such record books.

The outlook for agriculture in Maryland has become more encouraging than it has been for several years. In spite of increased costs, which can be counteracted by sound farm management practices mentioned, there has been a substantial rise in prices of farm products and material improvement in the statistical position of the industry.

AGRICULTURAL ENGINEERING

THERE was increased demand for assistance in most of the rural engineering problems encountered in former years, and a new set of problems was presented by crop adjustment activities. Owing to the diversified character of Maryland agriculture, the problem of devising practicable and at the same time satisfactory methods for determining compliance with crop adjustment contracts was more difficult than in some states. Specialists of the Service devoted considerable effort to developing and supervising plans of measurement and the determination of compliance was conducted in a highly satisfactory manner.

Farm Structures—Sets of building plans are maintained in the offices of all county agents, which may be examined by those in their respective counties who are interested in erecting new structures or remodeling old ones. These sets of plans include plans for all kinds and types of farm buildings, including such equipment as milk cooling tanks, and additions are made each year. During this year, eight designs were added to the blue-print service and 290 building plans were sent to 205 farmers and contractors on request.

Drainage—Thirteen surveys for drainage were made, involving 145 acres. There were also two surveys for irrigation, and three surveys associated with land terracing.

Other Activities—Demands for information and advice, either in the way of demonstrations, or by letters and visits, covered a wide range of problems encountered on the farm and in the farm home. Water systems, sewage disposal, and repair of machinery were among the most common types of service requested. Owing to the fact that the Rural Electric

Project, which had been conducted in cooperation with a number of agencies for several years, was discontinued, it was necessary for the Extension Service to carry on the work in that field to the extent that facilities permitted.

FARM STATISTICS AND CROP ESTIMATES

RELIABLE statistics and estimates regarding the agriculture of the State have always been extremely important and are absolutely essential in connection with the crop adjustment programs. Planned production must necessarily be based upon information regarding yields, acreages, prices, and other factors having a bearing on the various phases of the farm industry.

Through a cooperative arrangement with the Division of Crop Estimates of the U. S. Department of Agriculture, trained statisticians are stationed at the University of Maryland. It was necessary to increase this force during the last year and, in addition, the Extension Service maintained a specialist in this line of work.

It is a pleasure to express appreciation of the Service for the cordial and able cooperation received from Mr. Richard C. Ross, the Statistician in Charge, and his successor in the latter part of the year, Mr. J. A. Ewing.

HOG CHOLERA CONTROL

THE EXTENSION SERVICE, through the County Agents, works in close cooperation with those in charge of hog cholera control. These officials report only 277 outbreaks of hog cholera in 1934. With one exception, this is the smallest number of outbreaks reported in any year since this work was started fifteen years ago. Records indicate also that the large hog producing sections suffered less loss from ravages of hog cholorea than in previous years. The majority of the Maryland outbreaks come from cholera-infected pork products that are imported into this State, in the form of dressed meat or live hogs for immediate slaughter. With the reduced incidence of infection in the exporting States, the danger to swine herds in Maryland is also lessened.

Approximately 70%, or 193 of the outbreaks were of the backyard type, or where hogs are kept in pens or small lots. About 30%, or 84 of the outbreaks occurred on farms where hogs are bred and raised, but garbage feeding plants were maintained on 12 of these farms. There were, therefore, hog cholera outbreaks on only 72 farms where reasonable care was used to prevent exposure to known sources of danger. Year by year, the percentage of farm herds that contract hog cholera is growing less. This is attributed to a more widespread adoption and understanding of the sanitary practices necessary to prevent or control outbreaks of this disease.

As in past years, Maryland records indicate that over 90% of all cholera outbreaks may be prevented by proper herd management and feeding. Over 83% of the outbreaks this year were caused by feeding cholera-infected pork trimmings or bones in the kitchen wastes and garbage to susceptible hogs. Over 14% were caused by permitting sick or exposed hogs to come on the premises. The factors most commonly mentioned as spreaders of hog cholera, such as dogs, flies, streams, trucks, and the like, were again found to play a very minor role. It is evident that primary outbreaks can effectively be prevented by employing costless sanitary practices, and widespread outbreaks do not occur when proper control measures are enforced.

The cooperation of veterinarians, county agents, stockmen, and others interested in the swine industry was enlisted in promoting the Maryland Plan for Control of Hog Cholera. Help from these various agencies was most generously given in the past, and will be needed in the future, if progressive control of this disease is to be continued.

GENERAL EDUCATIONAL EXTENSION

THE constantly increasing interest in topics not directly associated with practical phases of farming and farm life, which has been evident for a number of years, continued through the past year. Demands for speakers and information on the more general and cultural subjects were much greater than could be satisfied with the very limited force available. A part-time specialist in Extension Education is employed and calls for his services are much more numerous than he can

meet. Hearty cooperation is given by other specialists of the University and by speakers from the Department of Agriculture and elsewhere, but this is a phase of extension activities which should be expanded at the earliest opportunity.

Women's organizations have shown particular interest in parliamentary procedure and schools were held for the purpose of giving training and practice in this subject. Development of community and club choruses and the need for leadership in conducting reading courses are other phases in which there is insistent demand.

Adult Education—It has been the hope for a number of years that provision might be made for preparing and conducting definite courses of study by correspondence for the benefit of adults who are anxious to continue their development along specific lines. The desire of a large number of adults to continue self-improvement is most evident and it is not possible to estimate the extent to which demand would develop for adult education in the general and cultural subjects, if facilities were available to permit giving encouragement to those who might be interested. In this field lies a vast opportunity, when conditions permit, for the Extension Service and the University to greatly extend their usefulness and value to the people of the State.

MISCELLANEOUS WORK

HEARTY COOPERATION was received from those associated with other branches of the University. Due to the many new activities and problems, more than the usual number of conferences was necessary and information on many subjects was required. The assistance and advice of specialists in various branches of the Institution is greatly appreciated. Special mention is due to Dr. H. J. Patterson, Director of the Experiment Station and Dean of the College of Agriculture, for his cordial support and helpful suggestions at all times. Included among other specialists to whom acknowledgement is due are Professor J. E. Metzger, Dr. DeVoe Meade, and Professors Geary Epply, B. E. Carmichael, and L. W. Ingham, and others.

STATE HORTICULTURAL DEPARTMENT

ADMINISTRATION of the State Horticultural Department has been for many years under the direction of the Extension Director. This arrangement has proved mutually helpful and economic in a number of respects. In many cases it is practically impossible to differentiate between activities in control of insect pests and plant diseases and activities designed to give information for their control. Such difficulties are obviated when the same specialists handle both lines of work. A more comprehensive statement of the activities conducted by the State Horticultural Department is presented in a separate report.

CONCLUSION

EFFORT was made to curtail the size of this report. Many details and lines of work are eliminated or mentioned but briefly to convey an idea of the many features and activities that come under the direction of the Service. Many features of control activities under the administration of the Service are covered in the report of the State Horticultural Department.

Fortunately, notwithstanding the handicap due to reduction in funds, we have been able to maintain our force in full during the year. The spirit of the organization has been splendid in making sacrifices to meet the need of the hour. We are naturally hopeful that conditions will continually improve so that proper restitution can be made in recognition of the Service rendered.

The Service is indebted to the officials in charge of Extension Work in the U. S. Department of Agriculture for their sympathetic cooperation. Likewise, we are indebted to the State farm organizations, the Grange and Farm Bureau, for their assistance and encouragement.

I desire to express my deep appreciation to all members of the staff and the office force for their loyal support and assistence in conducting the unusual emergency work of the year.

Grateful acknowledgement is made also of the splendid and sympathetic interest of President Pearson in furthering Extension work.

SUMMARY STATEMENT OF EXPENDITURES BY PROJECTS, SHOWING SOURCES OF FUNDS USED FOR EXTENSION WORK, FISCAL YEAR ENDED JUNE 30, 1934

Projects	Total	Federal Funds			Offset Funds	Funds Not Used As Offset		
		Smith-Lever	Capper-Ketcham	Additional Cooperative		College and State	County	Other
Administration	$14,051.68	$6,242.04	--------	--------	$3,862.91	$3,946.73	--------	--------
Publications	10,546.58	3,564.11	--------	$270.07	2,755.29	3,957.11	--------	--------
County Agent work	113,677.54	32,408.81	$15,740.59	1,818.57	31,420.20	7,686.67	$22,993.23	$1,609.47
Home Demonstration work	85,000.55	14,942.64	10,336.02	7,547.23	25,189.19	5,077.08	18,415.25	3,493.14
Nutrition	3,044.51	1,494.67	--------	--------	989.68	543.64	--------	16.52
Clothing	3,130.49	1,883.15	--------	--------	1,073.22	170.47	--------	3.65
Agronomy	4,168.99	1,726.42	--------	--------	1,558.22	863.35	--------	21.00
Animal husbandry	4,311.79	1,396.10	--------	--------	1,678.15	1,234.14	--------	3.40
Horticulture	9,307.63	5,462.93	--------	--------	1,860.17	1,980.73	--------	3.80
Dairying	11,186.51	2,566.03	--------	--------	1,664.34	6,311.99	--------	644.15
Agricultural marketing	12,029.92	685.95	--------	--------	575.00	10,768.97	--------	--------
Poultry Husbandry	4,179.95	170.50	--------	--------	2,263.96	1,721.24	--------	24.25
Entomology	29,024.25	1,424.00	--------	--------	100.00	27,478.02	--------	22.23
Pathology	5,877.38	1,985.78	--------	--------	1.35	3,871.55	--------	18.70
Canning crops	8,123.64	2,231.45	--------	--------	66.85	5,757.59	--------	67.75
Farm Forestry	1,597.71	--------	--------	--------	1,423.40	174.31	--------	--------
Poultry marketing	2,716.64	89.80	--------	1,618.01	244.00	715.91	--------	48.92
Agricultural Engineering	2,806.29	219.85	--------	2,444.77	--------	138.00	--------	3.67
Crop Statistics	817.41	--------	--------	632.30	--------	182.91	--------	2.20
Economics and Farm Management	3,213.47	321.14	--------	2,669.05	--------	223.28	--------	--------
Apiculture	1,245.45	410.55	--------	--------	--------	834.90	--------	--------
General Educational Extension	8,631.45	--------	--------	--------	--------	2,261.00	--------	6,370.45
Total Expenditures	$338,689.83	$79,225.92	$26,076.61	$17,000.00	$76,725.93	$85,899.59	$41,408.48	$12,353.30

SUMMARY STATEMENT OF EXPENDITURES BY PROJECTS, SHOWING CLASSIFICATION OF EXPENDITURES FROM ALL FUNDS USED FOR EXTENSION WORK, FISCAL YEAR ENDED JUNE 30, 1934

	Personal Service	Supplies and Materials	Communication Service	Travel Expenses	Transportation of Things	Printing, Binding and Cuts for Publications	Furnishing of Heat, Light, Power, and Elec.	Equipment	Miscellaneous	Total
Administration	$7,108.51	$2,144.33	$1,968.44	$59.45	$1,304.35	-------	$752.66	$609.68	$104.26	$14,051.68
Publications	6,034.70	192.50	1,306.32	39.75	22.64	$2,908.32	------	22.35	20.00	10,546.58
County Agent Work	89,988.27	3,409.76	11.29	19,512.22	10.16	-------	------	520.50	225.34	113,677.54
Home Demonstration Work	65,375.39	3,152.18	34.62	15,812.70	28.11	-------	------	22.65	574.90	85,000.55
Nutrition	2,496.81	54.13	4.79	453.88	18.40	-------	------	16.50	-------	3,044.51
Clothing	2,609.49	143.35	4.50	371.23	1.92	-------	------	-------	-------	3,130.49
Agronomy	3,503.43	17.00	33.15	605.71	1.70	-------	------	-------	8.00	4,168.99
Animal Husbandry	3,299.69	7.50	1.60	1,003.00	-------	-------	------	-------	-------	4,311.79
Horticulture	8,003.05	54.74	2.70	1,246.89	.25	-------	------	-------	-------	9,307.63
Dairying	8,815.85	42.35	1.12	2,309.99	1.34	-------	------	15.86	-------	11,186.51
Agricultural Marketing	9,253.56	515.71	635.23	1,441.10	.36	-------	------	175.46	8.50	12,029.92
Poultry Husbandry	3,362.00	19.12	-------	760.18	-------	-------	------	38.65	-------	4,179.95
Entomology	24,311.56	1,187.73	275.62	2,936.67	8.59	-------	------	52.85	251.23	29,024.25
Pathology	4,156.37	150.10	6.11	1,541.79	1.46	-------	------	21.55	-------	5,877.38
Canning Crops	6,387.50	105.57	345.55	1,261.35	3.27	-------	------	20.40	-------	8,123.64
Farm Forestry	1,044.98	29.75	2.00	514.98	-------	-------	------	6.00	-------	1,597.71
Poultry Marketing	1,949.00	122.15	-------	638.60	1.39	-------	------	5.50	-------	2,716.64
Agricultural Engineering	2,182.50	5.59	1.40	616.30	.50	-------	------	-------	-------	2,806.29
Crop Statistics	754.41	-------	-------	60.80	-------	-------	------	-------	2.20	817.41
Economics and Farm Management	2,740.16	1.40	11.85	460.06	-------	-------	------	-------	-------	3,213.47
Apiculture	813.75	-------	.85	430.85	-------	-------	------	-------	-------	1,245.45
General Educational Extension	6,410.85	169.75	103.74	517.64	5.51	5.75	------	41.49	1,376.72	8,631.45
Total Expenditures	$260,601.83	$11,524.71	$4,750.88	$52,595.14	$1,409.95	$2,914.07	$752.66	$1,569.44	$2,571.15	$338,689.83

(Continued from Second Page Cover)

COUNTY AGENTS—(Continued)

County	Name	Headquarters
Carroll	*L. C. Burns	Westminster
Cecil	*J. Z. Miller	Elkton
Charles	*P. D. Brown	La Plata
Dorchester	*Wm. R. McKnight	Cambridge
Frederick	*H. R. Shoemaker	Frederick
Garrett	*J. H. Carter	Oakland
Harford	*H. M. Carroll	Bel Air
Howard	*John W. Magruder	Ellicott City
Kent	*J. D. McVean	Chestertown
Montgomery	*O. W. Anderson	Rockville
Prince George's	*P. E. Clark	Upper Marlboro
Queen Anne's	*Kenneth Baker	Centerville
St. Mary's	*G. F. Wathen	Loveville
Somerset	*C. Z. Keller	Princess Anne
Talbot	*R. S. Brown	Easton
Washington	*M. D. Moore	Hagerstown
Wicomico	*J. P. Brown	Salisbury
Worcester	*R. T. Grant	Snow Hill

ASSISTANT COUNTY AGENTS

Allegany, Carroll and Washington	*Milo S. Downey	Cumberland
Baltimore	W. H. Carroll	Towson
Charles	*Bergen Brown	La Plata
Harford	*G. W. Clendaniel	Bel Air
Kent	*Stanley B. Sutton	Chestertown
Montgomery	*A. A. Ady	Rockville

Local Agents—(Negro Work)

County	Name	Headquarters
Southern Maryland	*J. F. Armstrong	Seat Pleasant
Eastern Shore	*L. H. Martin	Princess Anne

HOME DEMONSTRATION AGENTS—1934

County	Name	Headquarters
Allegany	*Maude A. Bean	Cumberland
Anne Arundel	*Mrs. Georgiana Linthicum	Annapolis
Baltimore	*Anna Trentham	Towson
Calvert	*E. Elaine Knowles	Prince Frederick
Caroline	*Bessie M. Spafford	Denton
Carroll	*Agnes Slindee	Westminster
Cecil	*Viola G. Cook	Elkton
Charles	*Mary Graham	La Plata
Dorchester	*Hattie E. Brookes	Cambridge
Frederick	*Helen E. Pearson	Frederick
Garrett	*Margaret K. Burtis	Oakland
Harford	*Catharine Maurice	Bel Air
Howard	*Myrne L. Hendry	Ellicott City
Kent	*Helen M. Schellinger	Chestertown
Montgomery	*Edythe M. Turner	Rockville
Prince George's	*Ethel M. Regan	Hyattsville
Queen Anne's		
St. Mary's	*Ethel Joy	Leonardtown
Somerset	*Hilda Topfer	Princess Anne
Talbot	*Margaret Smith	Easton
Washington	*Ardath E. Martin	Hagerstown
Wicomico	*Marian G. Swanson	Salisbury
Worcester	*Lucy J. Walter	Snow Hill

LOCAL HOME DEMONSTRATION AGENTS (Negro Work)

County	Name	Headquarters
Charles, St. Mary's Prince George's and Montgomery	*Mrs. Arminta W. Dixon	Washington, D. C.
Somerset	*Mrs. Justine N. Clark	Princess Anne

*In cooperation with U. S. Department of Agriculture.
†Part-time specialists.

Total Expenditures	$260,601.83	$11,524.71	$4,750.88	$52,595.14	$1,409.95	$2,914.07	$752.66	$1,569.44	$2,571.15	$338,689.83

SUMMARY STATEMENT OF EXPENDITURES BY PROJECTS, SHOWING CLASSIFICATION OF EXPENDITURES FROM ALL FUNDS USED FOR EXTENSION WORK, FISCAL YEAR ENDED JUNE 30, 1934

	Personal Service	Supplies and Materials	Communication Service	Travel Expenses	Transportation of Things	Printing, Binding and Cuts for Publications	Furnishing of Heat, Light, Power, and Elec.	Equipment	Miscellaneous	Total
Administration	$7,108.51	$2,144.33	$1,968.44	$59.45	$1,304.35		$752.66	$609.68	$104.26	$14,051.68
Publications	6,034.70	192.50	1,306.32	39.75	22.64	$2,908.32		22.35	20.00	10,546.58
County Agent Work	89,988.27	3,409.76	11.29	19,512.22	10.16			520.50	225.34	113,677.54
Home Demonstration Work	65,375.39	3,152.18	34.62	15,812.70	28.11			22.65	574.90	85,000.55
Nutrition	2,496.81	54.13	4.79	453.88	18.40			16.50		3,044.51
Clothing	2,609.49	143.35	4.50	371.23	1.92					3,130.49
Agronomy	3,503.43	17.00	33.15	605.71	1.70				8.00	4,168.99
Animal Husbandry	3,299.69	7.50	1.60	1,003.00						4,311.79
Horticulture	8,003.05	54.74	2.70	1,246.89	.25					9,307.63
Dairying	8,815.85	42.35	1.12	2,309.99	1.34			15.86		11,186.51
Agricultural Marketing	9,253.56	515.71	635.23	1,441.10	.36			175.46	8.50	12,029.92
Poultry Husbandry	3,362.00	19.12		760.18				38.65		4,179.95
Entomology	24,311.56	1,187.73	275.62	2,936.67	8.59			52.85	251.23	29,024.25
Pathology	4,156.37	150.10	6.11	1,541.79	1.46			21.55		5,877.38
Canning Crops	6,387.50	105.57	345.55	1,261.35	3.27			20.40		8,123.64
Farm Forestry	1,044.98	29.75	2.00	514.98				6.00		1,597.71
Poultry Marketing	1,949.00	122.15		638.60	1.39			5.50		2,716.64
Agricultural Engineering	2,182.50	5.59	1.40	616.30	.50					2,806.29
Crop Statistics	754.41			60.80					2.20	817.41
Economics and Farm Management	2,740.16	1.40	11.85	460.06						3,213.47
Apiculture	813.75		.85	430.85						1,245.45
General Educational Extension	6,410.85	169.75	103.74	517.64	5.51	5.75		41.49	1,376.72	8,631.45
Total Expenditures	$260,601.83	$11,524.71	$4,750.88	$52,595.14	$1,409.95	$2,914.07	$752.66	$1,569.44	$2,571.15	$338,689.83

(Continued from Second Page Cover)

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Howard	*John W. Magruder	Ellicott City
Kent	*J. D. McVean	Chestertown
Montgomery	*O. W. Anderson	Rockville
Prince George's	*P. E. Clark	Upper Marlboro
Queen Anne's	*Kenneth Baker	Centerville
St. Mary's	*G. F. Wathen	Loveville
Somerset	*C. Z. Keller	Princess Anne
Talbot	*R. S. Brown	Easton
Washington	*M. D. Moore	Hagerstown
Wicomico	*J. P. Brown	Salisbury
Worcester	*R. T. Grant	Snow Hill

ASSISTANT COUNTY AGENTS

Allegany, Carroll and Washington	*Milo S. Downey	Cumberland
Baltimore	W. H. Carroll	Towson
Charles	*Bergen Brown	La Plata
Harford	*G. W. Clendaniel	Bel Air
Kent	*Stanley B. Sutton	Chestertown
Montgomery	*A. A. Ady	Rockville

Local Agents—(Negro Work)

County	Name	Headquarters
Southern Maryland	*J. F. Armstrong	Seat Pleasant
Eastern Shore	*L. H. Martin	Princess Anne

HOME DEMONSTRATION AGENTS—1934

County	Name	Headquarters
Allegany	*Maude A. Bean	Cumberland
Anne Arundel	*Mrs. Georgiana Linthicum	Annapolis
Baltimore	*Anna Trentham	Towson
Calvert	*E. Elaine Knowles	Prince Frederick
Caroline	*Bessie M. Spafford	Denton
Carroll	*Agnes Slindee	Westminster
Cecil	*Viola G. Cook	Elkton
Charles	*Mary Graham	La Plata
Dorchester	*Hattie E. Brookes	Cambridge
Frederick	*Helen E. Pearson	Frederick
Garrett	*Margaret K. Burtis	Oakland
Harford	*Catharine Maurice	Bel Air
Howard	*Myrne L. Hendry	Ellicott City
Kent	*Helen M. Schellinger	Chestertown
Montgomery	*Edythe M. Turner	Rockville
Prince George's	*Ethel M. Regan	Hyattsville
Queen Anne's		
St. Mary's	*Ethel Joy	Leonardtown
Somerset	*Hilda Topfer	Princess Anne
Talbot	*Margaret Smith	Easton
Washington	*Ardath E. Martin	Hagerstown
Wicomico	*Marian G. Swanson	Salisbury
Worcester	*Lucy J. Walter	Snow Hill

LOCAL HOME DEMONSTRATION AGENTS (Negro Work)

County	Name	Headquarters
Charles, St. Mary's Prince George's and Montgomery	*Mrs. Arminta W. Dixon	Washington, D. C.
Somerset	*Mrs. Justine N. Clark	Princess Anne

*In cooperation with U. S. Department of Agriculture.
†Part-time specialists.

Total Expenditures.....$260,601.83 | $11,524.71 | $4,750.88 | $52,595.14 | $1,409.95 | $2,914.07 | $752.66 | $1,569.44 | $2,571.15 | $338,689.83

TECHNOLOGY AND SCIENCE ROOM